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ANNUAL REPORTS, WAR DEPARTMENT

FISCAL YEAR ENDED JUNE 30, 1920

REPORT OF THE

SURGEON GENERAL

U. S. ARMY

TO THE SECRETARY OF WAR

1920

WASHINGTON
GOVERNMENT PRINTING OFFICE
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REPORT OF THE SURGEON GENERAL OF THE ARMY.

LETTER OF TRANSMISSION.

OCTOBER 9, 1920.

I have the honor to submit herewith the manuscript of the annual report of this office for the year 1920, covering the general activities of the Medical Department for the fiscal year ending June, 1920, and containing the statistics for the United States Army for the calendar year ending December 31, 1919.

During the calendar year 1917 the Medical Department rendered important assistance in the organization of the Army by mobilizing and instructing for the military service the medical, dental, veterinary, and nursing professions of this country; by training a vast enlisted personnel; by planning and providing hospital facilities; by procuring and distributing the necessary medical equipment and supplies; by conducting the physical examinations of all incoming officers and enlisted men; by safeguarding the health of the troops; and by providing expert medical and surgical care for all the military sick or injured.

In 1918 the preparatory work was completed and it was abundantly demonstrated on the battle fields of Europe and in the hospitals abroad and in this country how well the initial work had been carried out.

In 1919 and the early part of 1920 the wheels were reversed and the main work of the Medical Department consisted of assistance rendered in the demobilization of the war Army and the restoration of the sick and injured. This work was divided into the following main classes: Conducting physical examination of officers and enlisted men prior to discharge from the service, with a view to insuring proper records of their physical condition in order that the Government might promptly award its liberal compensation to all who merited it; returning to civil life, where they were much needed, as soon as conditions permitted, the emergency officers and enlisted men of the Medical Department; caring for the sick and restoring the wounded; reconstructing all possible disabled soldiers through the agency of vocational and educational training; and, finally, aiding in the building up of the new Army and the recruiting of the Medical Department thereof and the Medical Department sections of the Officers' Reserve Corps.

HEALTH OF THE ARMY.

The health of the Army during the fiscal year was satisfactory. At the beginning of the year 1919 the receding wave of the influenza epidemic of 1918 was present. This wave, however, ebbed rapidly and soon disappeared. The fear that the influenza pandemic might reap-

pear in the fall of 1919 was not realized and it began to be hoped that the winter would pass without a visitation of this disease in epidemic form. However, in January, 1920, the disease made its appearance almost simultaneously in civil and military communities. It spread rapidly to all areas and pneumonia promptly began to increase. Fortunately the epidemic proved to be much less menacing than the one of 1918; the incidence of influenza, the ratio of pneumonia complications, and the number of deaths were all very much lower in proportion to the number of men exposed.

In addition to the influenza epidemic, which brought about a considerable increase in the number of admissions, deaths, days lost, and discharges for disability during the year, a further increase in these rates was caused by the disabilities and diseases detected among the men who were being demobilized, as a result of the thorough physical examination to which each was subjected. A still further reason for the increase in the death rates and noneffective rates for the year was the definite policy of the War Department to retain in hospital, under treatment, all officers and men affected with tuberculosis or other chronic diseases, until the maximum degree of improvement was attained.

The general admission rates showed a material reduction from those of the preceding year. Practically all of the acute infectious diseases very materially decreased after the beginning of the year. Had it not been for the large number of deaths that occurred in hospitals in 1919 as a result of the sickness from respiratory diseases which had either begun during the latter part of 1918 or during the early part of 1919, and for the number of deaths from tuberculosis which occurred in hospitals as the result of patients being retained in the military service to attain the maximum degree of improvement, the death rate would have been very low.

The rate for discharges for disabilities throughout the year was abnormally high, largely due to the demobilization examinations.

For the same reasons, already cited, the number of days lost or the noneffective rates for diseases were high, especially in the United States and Europe.

GENERAL HOSPITALS.

At the beginning of the fiscal year 1920 there were 40,796 patients in the general and the base hospitals in this country. Of this number 30,000 were overseas cases. During the year 12,000 additional overseas cases and many home cases were received. At the end of the fiscal year only 5,083 cases were remaining in general hospitals, of which 2,000 were overseas cases. At the beginning of the fiscal year 1920, 31 general hospitals and, in addition, the hospitals at the ports of embarkation and the base hospitals in the various camps were in operation. At the end of the fiscal year all of these general hospitals, with the exception of nine, and all of the embarkation hospitals, had been discontinued. Such as were leased had had their leases canceled or the institutions had been turned over to the United States Public Health Service. Those belonging to the Government had reverted to their former use as post hospitals or military stations, or had been turned over to the Public Health Service or discontinued. All base hospitals were either discontinued, turned over to the Public

Health Service, or converted into camp hospitals and placed under the jurisdiction of the department commander.

DISCHARGE OF DISABLED SOLDIERS.

Previous to the enactment of the Sweet Act it was the policy to retain disabled soldiers in the Military Establishment until the maximum of restoration had been attained. The Sweet Act provided increased compensation for discharged disabled soldiers which exceeded considerably the pay of the soldier while in the military service. The policy was consequently modified by authorizing the discharge of all hospital cases who desired discharge after six months of definitive treatment, provided the disability was due to disease rather than wounds. Practically all such patients who were enlisted men requested their discharge after the period stated. Officer patients, whose pay in the service exceeded the compensation allowed by the War Risk Bureau, preferred to remain in the army.

Of the patients in general hospitals at the beginning of the fiscal year 4,802 cases of tuberculosis were under treatment in seven sanitaria. During the year 3,944 were admitted, 1,918 of whom came from overseas. At the end of the fiscal year 1,069 were being cared for in two hospitals.

At the beginning of the fiscal year there were 2,665 neuropsychiatric cases being treated in general hospitals; an additional thousand were admitted during the year. Practically all of these patients were disposed of before the end of the year; those who had recovered to such an extent that they could be discharged without danger to themselves or others were separated from the service at the hospitals and given transportation to their homes. All other cases were referred to the Bureau of War Risk Insurance, which usually designated a hospital in the vicinity of the patient's home for definitive treatment after discharge. The individual was transferred to the designated hospital and discharged from the military service after admission to that institution.

SPECIAL HOSPITALS.

The policy adopted at the beginning of the fiscal year of returning patients from overseas and transferring suitable cases to special hospitals greatly facilitated the handling of the wounded. Requests were frequently made by relatives and friends to have certain patients transferred to hospitals nearer their homes Wherever practicable, the requests were granted, but in many instances it was not feasible to do so, as it was impracticable to equip all hospitals with a qualified and experienced staff to care for every type of injury or disease.

RECONSTRUCTION.

Reconstruction of the sick and wounded was an important part of the work of the Medical Department. Physical reconstruction, as applied in military hospitals, may be defined as continued treatment carried to the fullest degree of maximum physical and functional restoration consistent with the nature of the disability of the sick or injured soldier, by the employment of all known measures of modern

medical and surgical management, including physio-therapy (thermo-, electro-, hydro-, and mechano-therapy, massage, calisthenics, gymnastics, military drill, and the like), curative mental and manual work (in wards, shops, schools, gardens, and fields), and sports and games in and out of doors. Educational and vocational training were important parts of the hospital work. Vocational training as employed included not only, as the name implies, teaching a vocation, but also such occupational activities as were intended primarily to keep the individual busy and thus improve his morale, while at the same time directing his mind and hands toward the acquirement of an occupation suited to his physical needs. Used this way educational and vocational training became therapeutic measures of considerable importance.

The fundamental aim of the educational and vocational work is curative. The specific purpose is to help each patient find himself and function again as a whole man, physically, socially, educationally, and economically: physically, by helping him to restore his body as far as possible to its normal condition; socially, by helping him to feel that notwithstanding his physical handicap, he may still be a self-reliant and self-respecting member of the community; educationally, by furnishing him with such training that he may make the most of his mental and physical resources and increase his personal efficiency; and economically, by providing him with the means of earning a livelihood so that upon his return to civil life he may be an economic asset instead of a liability.

Many patients have taken advantage of the educational and vocational training; each received personal attention directed to his individual problems; his case was carefully considered in order that he might study something which would be of value to him in the future.

SPECIAL VOCATIONAL TRAINING.

In the special hospitals for tuberculous and neuropsychiatric cases this work has been of particular service. In tuberculosis sanataria the curative value is very great, since with patients long bedridden, any useful occupation which will take them away from themselves and prevent morbid thoughts and tend to correct the mental condition is especially helpful in the progress of the case.

Among the neuro-psychiatric cases it does much to reestablish the patient's confidence in himself. A prime factor in such work was to obtain the gradual cooperation of the soldier in order that he might not be put at a task which would be distasteful and thereby arouse his antagonism. The helpless and irresponsible patients were coaxed to work in the wards. They began with small tasks, such as the winding of string, unraveling of burlap, basketry, rug weaving, knitting, etc. As each one regained his confidence and the control of his faculties and acquired more responsibility, he was allowed to do a different class of work requiring more physical and mental ability, such as carpentry, printing, typewriting, and automobile repairing.

At the beginning of the fiscal year 23 hospitals, with a total personnel of 1,520, were functioning in reconstruction, with 20,578 patients enrolled in educational work, and at the end of the year there were 10 hospitals with a staff of 452 and 5,217 patients.

PERSONNEL.

The total number of officers of the Medical Department, including those of the Sanitary Corps and Ambulance Service, who were discharged during the year amounted to 15,908. The net loss in the enlisted force amounted to 83,577. On July 1, 1919, there were 12,731 officers, including the Reserve Corps, in active service in the Medical Corps, and at the end of the fiscal year there were 1,748; the Dental Corps fell from 2,219 to 322; the Veterinary Corps from 1,024 officers to 283. In the Nurse Corps at the beginning of the year there were 9,616 nurses, and at the end of the year 1,551. There were also 549 student nurses remaining.

It has become increasingly difficult to obtain satisfactory candidates for the Medical, Dental, and Veterinary Corps. The number of vacancies in the Medical Corps alone on July 1, 1920, amounted to 1,041, and with few prospective accessions in view direct from civil life. It is anticipated that a considerable number of temporary officers will qualify in the approaching examination for appointment in the Regular Army.

The work of building up the Medical, Dental, and Veterinary sections of the Officers' Reserve Corps has progressed satisfactorily. At the end of the fiscal year in the Medical Corps the Reserve amounted to 5,611, in the Dental 3,699, in the Veterinary 331.

WOUNDED IN THE AMERICAN EXPEDITIONARY FORCES.

At the close of the calendar year 1919, which is the latest date for which definite statistics can be stated, 5,768 military patients whose admissions had been caused by injuries received in battle in Europe remained in Army hospitals in the United States. This number was only 2.57 per cent of the total number of casualties so handled. Not including marines, there were treated in United States Army hospitals, during the years 1917 and 1918, 224,089 officers and men of the Army who had been wounded in battle. Of this number 13,691, or 6.11 per cent, died as a result of their injuries: 158,585, or 70.77 per cent, were returned to duty in France; 70,175 cases, or 33⅓ per cent of all cases other than those which resulted in death, were returned to duty in 29 days or less, the average time for them being 14.17 days. There were returned to the United States for further treatment 51,813, or 23.12 per cent of the total. Of this number 20,588, or 39.74 per cent, were ultimately discharged as unfit for military duty, or with 10 per cent or more disability. In addition to this number, as stated, there were 5,768, or 11.13 per cent of the cases that were invalided home, remaining in hospital on December 31, 1919.

PROPORTIONAL LOSS.

Of the 2,039,329 men who were reported by the General Headquarters, American Expeditionary Forces, to have arrived in France, 110 men out of every 1,000 men were admitted to hospital as a result of battle injury, and 6¾ died in hospital as a result of those injuries. The Infantry suffered the heaviest loss in wounded and in killed, the former being 215.66 per 1,000 and the latter 12.77. The Signal Corps was second, with 52.22 wounded and 3.13 dying of wounds.

Monthly and Daily Loss.

The largest admissions during any one month occurred in October, 85,970; also the largest number of deaths as a result of battle injuries, in October, 5,684. The greatest number of wounded on any one day occurred on September 29, 8,358, and the largest number of deaths for wounds received on any day was 418.

MILITARY AGENTS.

Of the total admissions, gunshot injuries accounted for 147,651, or 65.90 per cent; gases for 70,552, or 31.49 per cent; and other military agents for 5,886, or 2.63 per cent. Of the 13,691 deaths, gunshot injuries accounted for 12,192, or 89.05 per cent; gas for 1,221, or 8.92 per cent; and other military agents for 278, or 2.03 per cent. Of each 100 men wounded by gunshot missile, 8.26 died in hospital; by gas, 1.73; and by other military agents, 4.72. There were discharged for disability as a result of gunshot wounds 17,176, or 11.63 per cent of the total; as the result of gases, 2,853, or 4.04 per cent; and of other military agents 559, or 9.50 per cent.

TIME LOST.

Thirty-three thousand two hundred and fifty-three of the gas cases, or 47.13 per cent of the total which did not result in death, were treated in hospital 29 days or less. The average time lost by this number of cases was 13.45 days. Of the 147,651 men wounded by gunshot missiles who were treated in hospital, 36,922, or 25.11 per cent, were treated in hospital 29 days or less; the average time for these cases was 15.09 days. Four cases of gassing were being treated in hospital at the end of the year 1919.

GAS CASES.

Of the total gas cases, 47.61 per cent were by gases, kind not specified; 39.28 per cent by mustard gas; 9.69 by phosgene; 2.61 by chlorine; and 0.82 by arsene. Of each 100 wounded by the various gases the following number died: By mustard, 2.16; by kind not specified, 1.63; by phosgene, 0.97; by chlorine, 0.38; and by arsene, 0.52.

GUNSHOT WOUNDS.

Of the men wounded by gunshot missiles, 50.71 per cent were by missiles, kind not specified; 22.88 per cent by shrapnel; 13.83 per cent by rifle ball or machine-gun bullet; 11.81 per cent by shell; 0.60 per cent by hand grenade; and 0.16 per cent by pistol ball. Of each 100 wounded by missile, not specified, 9.98 died; by shell, 9.77; by hand grenade, 6.36; by shrapnel, 5.88; by pistol ball, 5.37; and by rifle, 4.71.

OTHER WOUNDS.

As judged by the admissions to hospitals, the bayonet and the saber were military weapons of little importance as used against the American troops in the World War and against the northern troops

in the Civil War. As a result of the larger percentage of wounds being caused by machine-gun fire, a larger number of men received multiple wounds in the World War than in the Civil War.

LOCATION OF WOUNDS.

Of the total wounded in the World War, 72.62 per cent were wounds of the extremities and 27.41 of the trunk, head, and neck; in the Civil War 70.86 of the extremities and 29.15 of the trunk, head, and neck. Using statistics of the Civil War, for 1,173 men killed in action (these being the total cases where the location of wound was shown) and proportioning the figures for the two wars, it appears that approximately three-fifths of the total men wounded in action, whether resulting in death on the battle field or admission to hospital, were of the extremities, and that the remaining two-fifths were of the trunk, head, and neck.

MORTALITY.

The case mortality from gunshot wounds in the Civil War was 13.6 and in the late war 8.26. There was thus an actual saving in life in the World War among the Americans suffering from gunshot wounds of 5.34 per cent; consequently of 147,651 wounded by gunshot fire, 7,884 more would have died if treated as during the Civil War period. When the more destructive effect of the military agents are considered, with the greater prevalence of artillery missiles and the undoubtedly higher percentage of multiple wounds, it is evident that the saving of life was much greater than is apparent from these figures.

Notwithstanding the more unfavorable character of the modern wounds, in practically all instances, the only exception being wounds of the back, the case mortality by regions was lower than in the Civil War. The case mortality for gunshot wounds of the head, neck, and lower extremities were all reduced to approximately one-half of the Civil War figures.

FINAL RESULTS (DEFINITE DISABILITIES).

Final results have been catalogued for 19,768 of the 20,588 men who were discharged for disability, and for the 5,768 who remained in hospital on December 31.

No one soldier lost both arms and both legs, nor did any one soldier lose both arms or both legs with one other of the opposite extremities. Eleven lost both legs at the thighs, 1 both legs at the knee, 9 both legs below the knee, 1 both feet, and 3 one arm above the elbow with one leg at the thigh. In all, 4,403 soldiers lost part of one or more extremities. Counting traumatic cataract as loss of sight, 66 men lost both eyes or the sight of both eyes, 44 lost partial sight of both eyes, and 644 lost one eye or the sight of one eye; 4,790 soldiers had a partial or a complete ankylosis of one or more joints. The final results among the 19,768 wounded men catalogued showed 21,696 separate disabilities; 19,140 of these were the result of gunshot missiles and 2,556 of gas. Of the total injuries by the various missiles, the following percentages were catalogued in the final result for each 1,000 injured: Hand grenade, 24.20; shell, 22.04; rifle, 18.30; shrap-

nel, 15.44; other gunshot missiles, 7.43. Of the total cases gassed, only 2,556, or 3.62 per cent, showed disabilities in the final results; of this number chronic bronchitis accounted for 2,198.

KILLED AND WOUNDED.

During the Civil War the killed in action were reported to have been 44,238, and the total wounded tabulated 246,712, or a proportion of killed to wounded of 1 to 5.57. In the World War the number of killed in action as reported by The Adjutant General amounted to 34,249, and the wounded, as reported to this office, 224,089, or a proportion of 1 to 6.54. It is stated that no doubt a number of wounded during the Civil War were not counted. If this number of wounded was added to the number counted, the proportion of killed to wounded in these wars would no doubt be approximately the same.

PHYSICAL EXAMINATIONS.

DEMOBILIZATION.

One of the most important functions of the Medical Department has been the physical examination of officers and men upon their separation from the military service. Camp examining boards organized to examine selective service recruits were in operation at all of the large camps when the armistice was signed. As the process of demobilization was simply a reversal of the draft procedure, these groups of officers, with their already rich experience, were continued as demobilization boards. The boards were augmented whenever necessary, and every effort was made to maintain the standard of professional work at as high a plane as possible. The ideal board consisted of 23 members, with the various specialties all represented. Experience showed that a board so constituted could examine a thousand men in a day, and, when necessary, could handle an emergency increase of 25 per cent.

The instructions prescribed that for all officers or soldiers discharged with a disability of 10 per cent or more a copy of the report of the physical examination should be forwarded to the Bureau of War Risk Insurance, in order that this bureau might have timely notice of all cases requiring compensation or hospital treatment. Of approximately 3,350,000 men demobilized, records have been studied of 3,154,676; 93.7 per cent were discharged with no disability or with less than 10 per cent; 5.3 per cent were reported to the Bureau of War Risk Insurance with a disability of 10 per cent or over; the others were held either on account of diseases needing additional treatment to attain a maximum improvement, or for other purposes. When it is considered that these figures include all men who were inducted for limited service, of which there were approximately 70,000, it is apparent that the number of disabilities was small.

RECRUITING.

Another important function of the Medical Department has been the examination of recruits for the Regular Army. The recruiting was resumed early in 1919, and has continued from that time to the

present with a vigor heretofore unequaled. Unusual inducements have been held out to prospective recruits in the form of professional and educational training. Whenever practicable, examining boards have been constituted at recruit depots and larger posts containing specialists and similar to the ones used for the examination of selective service men and for the demobilization of the military personnel. It has thus been possible to insure examinations which are more thorough in some respects than was the rule before the beginning of the war. One important innovation has been the psychological examination. The psychological rating has a distinct and special value during the early days of the recruit's service before his aptitude for the strange life has been demonstrated to his superiors. It is further of value in assisting the neuro-psychiatrist to eliminate the mental defectives. Its main value is, however, to render aid in promptly placing each man where he may render the maximum of service. It has been necessary to devise a test to eliminate the mentally unfit among the illiterates and non-English-speaking men who are now accepted for the military service with a view to educating them sufficiently for army needs.

CHIEF SURGEON, AMERICAN EXPEDITIONARY FORCES.

The office of the chief surgeon, American Expeditionary Forces, operated as such until September 1, 1919. From that time until the final discontinuance of the office organization in the latter part of the year its activities were confined to the American forces in France, the Medical Department in Germany being under the jurisdiction of the commanding general of the forces there. The most important function of the office of chief surgeon was to supervise the early return to the United States of the sick and disabled remaining in France and of the large Sanitary personnel which remained abroad on July 1, 1919. Temporary officers and men were sent home as they could be spared, being replaced by Regulars when necessary. Many financial accounts involving the payment for hospital supplies and for hospital treatment were settled. Base and camp hospitals were released as rapidly as possible, though a sufficient number of hospitals was always maintained. In December, 1919, arrangements were made for the care of the sick in civil hospitals in Paris. The Polish Typhus Relief Expedition was organized, its personnel being furnished by officers and men of the Regular Medical Department. This expedition was later transferred to the American forces in Germany.

CHIEF SURGEON, AMERICAN FORCES IN GERMANY, THIRD ARMY.

The medical activities with the American Forces in Germany are divided into two parts, one of which ceased on May 31, 1919, before the beginning of the past fiscal year; the other extending from June 1, 1919, to the present time. For the first period the work was connected with the Third Army, the Army of Occupation. The health of the troops was satisfactorily safeguarded; hospital centers, with convalescent camps, were established at Coblenz and Treves, and such other hospitals as were needed were provided. Care was taken to see that the various special professional services were well provided for.

REGULAR ARMY OF OCCUPATION IN GERMANY.

HOSPITALIZATION.

After the signing of peace by Germany and the discontinuance of the Third Army of Occupation, the Medical Department organization was planned to care for the Regular Army of Occupation. The plan of hospitalization was necessarily changed, and instead of evacuating to the United States patients not expected to return to duty within a short period, all cases, except such as were manifestly unfit for further military service, were retained and treated in Germany. A base hospital with a well-qualified staff was established in Coblenz. This assured the proper segregation of contagious diseases and the receipt by patients of the benefit of the best modern diagnostic methods and treatment by specialists. Attached to this hospital was a convalescent camp. A hospital train was used to evacuate the sick to Antwerp. Such infirmaries and small hospitals as became necessary were maintained. A base hospital was established at Antwerp for the care of American soldiers sick en route to or from Germany.

HEALTH.

The health of the command has been satisfactory. No communicable diseases of any importance occurred with the exception of an epidemic of influenza in 1919.

EXPEDITIONS IN SIBERIA AND NORTH RUSSIA.

Owing to the larger activities in the United States and in France, brief if any mention has heretofore been made of the medical activities connected with the expedition in North Russia and in Siberia. In both of these far-away sub-Arctic countries the Medical Department has been represented and has performed its health-preserving and life-saving work satisfactorily. In North Russia the area occupied by the expedition covered 15,000 square miles, with a front 400 miles in length, encircling Archangel on three sides. In Siberia, with headquarters at Vladivostok, the American troops were scattered along the railroad for a distance of 1,700 miles or more.

HOSPITALIZATION AND MEDICAL PERSONNEL.

For North Russia the base hospital was established at Archangel and for Siberia at Vladivostok. In both cases the problem presenting the greatest difficulty was the distribution of the limited medical personnel to insure proper attention for the men of the expedition scattered for the most part in small detachments over such a wide area. In North Russia the personnel was assigned to hospitals, dressing stations, and aid stations under the direction of United States medical officers, and served the needs of both our men and of those of the Allies. In other places they were assigned with the British, French, or Russians to hospitals or dressing stations. All of the hospitals of the allied forces cared for the sick and wounded regardless of the nationality of the patients. In Siberia hospitals were provided along the route as necessary.

SANITATION.

In both of these countries the sanitary conditions among the civil population were bad. Due to the disorder of civil governments, to the large number of refugees, and to the poverty of the inhabitants, it was impossible for them to maintain even a semblance of sanitation. Epidemic diseases were prevalent among them at practically all times. Due, however, to the unceasing activities and vigilance of the medical officers with the expedition, and to the care of all officers, no epidemics of any importance occurred among our troops.

EVACUATION OF PATIENTS.

The problem of the evacuation of the sick and the wounded in both countries presented great difficulties. In Siberia it was solved by using improvised hospital trains. This was possible as the troops were scattered along the main railroad or its branches. In North Russia such was not the case. During the winter months only one method of transportation was available and that was by sleds. After various experiments the usual type of Russian sled was used. Patients were placed in them wrapped in sleeping bags, with mittens and fur caps. Special arrangements were made for their care, comfort, and treatment at rest houses and villages along the route. With a temperature varying from $-30°$ to $-50°$ F., many sick and wounded were conveyed distances ranging up to 224 miles with no ill effects; only one patient died while en route, and that was an advanced case of pulmonary tuberculosis. The long journey in the open air seemed to be of benefit to many of them. The Russian Sisters upon one occasion, in an evacuation of the wounded, rendered valuable aid and walked many miles alongside the sleds, helping to make the wounded comfortable.

NEUROPSYCHOPATHIC CASES.

It speaks well for the morale and personality of the American youth, that in spite of the prolonged severe winter, with the almost continuous absence of sunlight during a part of it, the isolation in small detachments, the inaccessibility and delays in receiving mail incident to transportation conditions, the infrequency of relief, the prevalence of rumors, the monotony of the food and environments, stationed in a country sparsely settled at best, frequently closely hemmed in by forests, and kept in a constant state of tension by the activity of the enemy, that nervous and mental disorders were rare both in Russia and Siberia.

Very respectfully,

M. W. IRELAND,
Surgeon General, United States Army.

The SECRETARY OF WAR.

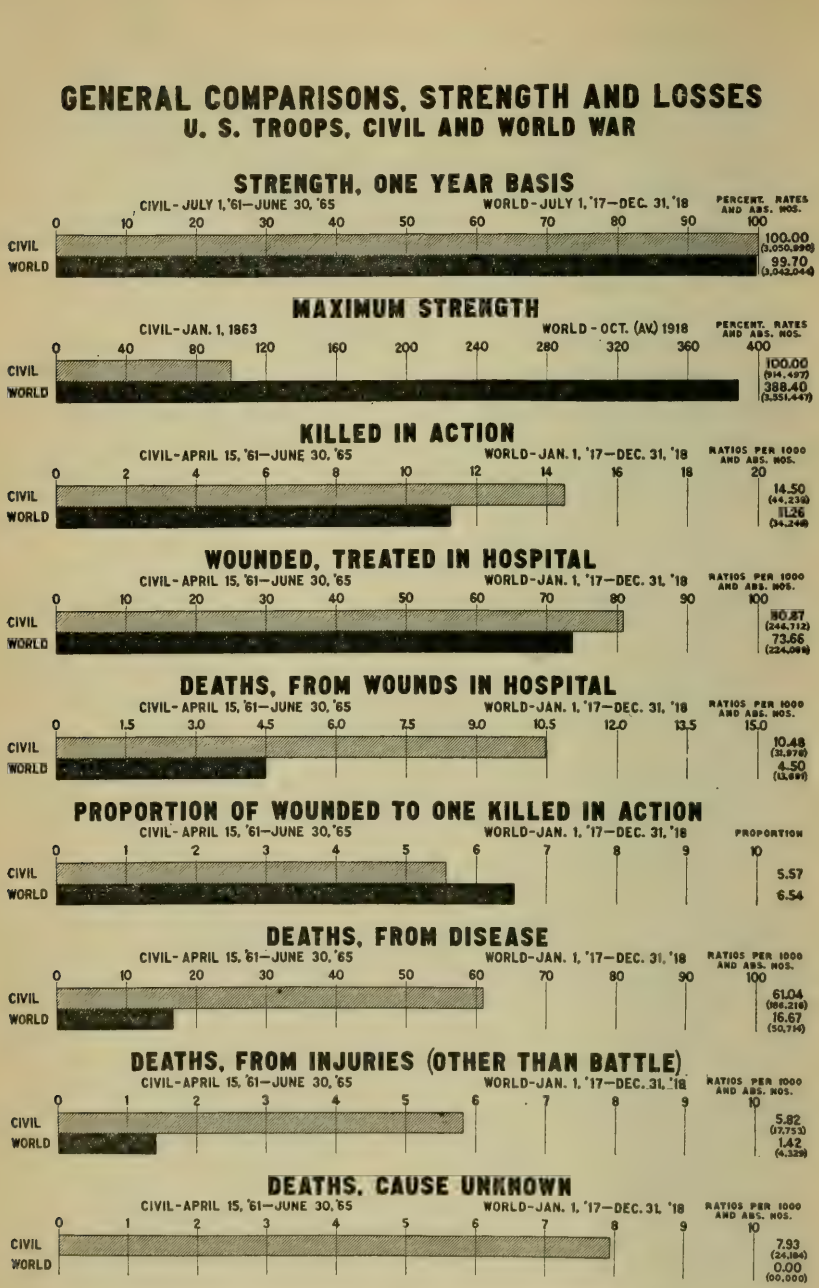

GENERAL COMPARISONS, STRENGTH AND LOSSES
U. S. TROOPS, CIVIL AND WORLD WAR
STRENGTH, ONE YEAR BASIS
CIVIL - JULY 1, '61—JUNE 30, '65
WORLD - JULY 1, '17—DEC. 31, '18
PERCENT, RATES AND ABS. NOS.
0 10 20 30 40 50 60 70 80 90 100
CIVIL
WORLD
100.00 (3,050,998)
99.70 (3,042,044)
MAXIMUM STRENGTH
CIVIL - JAN. 1, 1863
WORLD - OCT. (AV.) 1918
PERCENT, RATES AND ABS. NOS.
0 40 80 120 160 200 240 280 320 360 400
CIVIL
WORLD
100.00 (914,497)
388.40 (3,551,447)
KILLED IN ACTION
CIVIL - APRIL 15, '61—JUNE 30, '65
WORLD - JAN. 1, '17—DEC. 31, '18
RATIOS PER 1000 AND ABS. NOS.
0 2 4 6 8 10 12 14 16 18 20
CIVIL
WORLD
14.50 (44,238)
11.26 (34,248)
WOUNDED, TREATED IN HOSPITAL
CIVIL - APRIL 15, '61—JUNE 30, '65
WORLD - JAN. 1, '17—DEC. 31, '18
RATIOS PER 1000 AND ABS. NOS.
0 10 20 30 40 50 60 70 80 90 100
CIVIL
WORLD
80.87 (246,712)
73.66 (224,098)
DEATHS, FROM WOUNDS IN HOSPITAL
CIVIL - APRIL 15, '61—JUNE 30, '65
WORLD - JAN. 1, '17—DEC. 31, '18
RATIOS PER 1000 AND ABS. NOS.
0 1.5 3.0 4.5 6.0 7.5 9.0 10.5 12.0 13.5 15.0
CIVIL
WORLD
10.48 (31,978)
4.50 (13,691)
PROPORTION OF WOUNDED TO ONE KILLED IN ACTION
CIVIL - APRIL 15, '61—JUNE 30, '65
WORLD - JAN. 1, '17—DEC. 31, '18
PROPORTION
0 1 2 3 4 5 6 7 8 9 10
CIVIL
WORLD
5.57
6.54
DEATHS, FROM DISEASE
CIVIL - APRIL 15, '61—JUNE 30, '65
WORLD - JAN. 1, '17—DEC. 31, '18
RATIOS PER 1000 AND ABS. NOS.
0 10 20 30 40 50 60 70 80 90 100
CIVIL
WORLD
61.04 (186,218)
16.67 (50,714)
DEATHS, FROM INJURIES (OTHER THAN BATTLE)
CIVIL - APRIL 15, '61—JUNE 30, '65
WORLD - JAN. 1, '17—DEC. 31, '18
RATIOS PER 1000 AND ABS. NOS.
0 1 2 3 4 5 6 7 8 9 10
CIVIL
WORLD
5.82 (17,753)
1.42 (4,329)
DEATHS, CAUSE UNKNOWN
CIVIL - APRIL 15, '61—JUNE 30, '65
WORLD - JAN. 1, '17—DEC. 31, '18
RATIOS PER 1000 AND ABS. NOS.
0 1 2 3 4 5 6 7 8 9 10
CIVIL
WORLD
7.93 (24,184)
0.00 (00,000)

FIG. 1.

[The "strength, one year basis," is the aggregate of the annual strengths for the period. This strength is used to obtain all ratios shown hereon.]

BATTLE CASUALTIES, 1917 AND 1918.

IN THE AMERICAN EXPEDITIONARY FORCES.

General Consolidation.

At the close of the calendar year 1919, 5,768 military patients whose admissions had been caused by injuries received in battle in the American Expeditionary Forces (exclusive of Russia and Siberia) remained in Army hospitals in the United States. Since this number was only 2.57 per cent of the total number of cases of battle injuries admitted, and since the treatment of them was sufficiently advanced to allow very good estimates to be made of the final results, it seems that a fairly good summary can now be outlined of the injuries received in battle by the American troops.

REVISION OF TABLES, 1919 REPORT.

In the annual report of this office for the year 1919, which contained the statistics for the calendar year of 1918, tables were published on pages XXVIII to XXXVII, inclusive, giving such statistical data as were then available of such of the battle injuries received in the American Expeditionary Forces as were treated in hospitals. It has, however, been necessary to revise these tables for two reasons. First, since these tables were prepared for publication a large number of additional and corrected reports of hospital cases have been received. Second, during the years 1918 and 1919 all individual reports received of hospital cases treated either in this country or abroad were arranged in one general alphabetical file. It was thus possible to prevent duplication of individual cases to a very great extent. Since, however, names were often misspelled, it frequently occurred that, in spite of all precautions that could be taken, two statistical cards were made for the one case. Since the preparation of the tables published in the 1919 report all statistical cards for these battle casualties have been carefully assembled and sorted by the soldier's individual Army serial number. In this way a number of duplicates were eliminated. It can now be said with a fair degree of assurance that the number and results of the battle casualties reported in the attached tables are approximately correct.

KILLED IN ACTION NOT INCLUDED.

No attempt is made to include the number of the soldiers of the United States Army who were killed in action. Reports were made to this office of only a small per cent of such cases, and for such as were reported the information furnished was so meager in detail as to be of little value. Such figures as are referred to in this report of the killed in action are taken from the report of The Adjutant General of the Army.

MARINES NOT INCLUDED.

The wounded that occurred among the United States Marines are also not included in the following tables. Such reports of wounded marines as were received from United States Army hospitals were forwarded to the Bureau of Medicine and Surgery, United States Navy Department.

General Statistics.

During the years 1917 and 1918 there were admitted to the United States Army hospitals 224,089 officers and men of the Army who had been injured in battle. Of this number 13,691, or 6.11 per cent, died as a result of these injuries. There were returned to the United States for further treatment 51,813, or 23.12 per cent of the total; 158,585, or 70.77 per cent, were returned to duty in France; 70,175 cases, or 33.35 per cent of all cases other than those which resulted in death, were returned to duty in 29 days or less, the average time for these cases being 14.17 days. Of the 51,813 men who were returned to the United States for further treatment, 20,588, or 39.74 per cent of them, were ultimately discharged in 1918 or 1919 as unfit for military duty or with 10 per cent or more disability. In addition to this number discharged there were, as stated above, 5,768, or 11.13 per cent of the cases invalided home, remaining in hospital on December 31, 1919.

ANNUAL RATES.

Admissions.—Speaking now of the general rates, admissions, deaths, discharges, and days lost in terms of annual rates, 215.96 out of every 1,000 of the average annual number of enlisted men serving in France were admitted to hospital during the war for a battle injury of some character. The number of officers admitted was 174.97. The combined annual admission rate for officers and men was 214.12. The injuries grouped under the term of "Deleterious effects of gas" caused the admission of 67.41 per 1,000, lacerated wounds 44.47, penetrating wounds 40.49, and fractures 24.14.

Deaths.—The deaths that occurred in hospital as a result of these battle injuries were 13.08 per 1,000 of enlisted men, 13.17 of officers, and 13.08 of the total. Penetrating wounds caused the death of 4.75 per 1,000, multiple wounds 3.06, fractures 2.63, and deleterious gases 1.17.

Discharges for disability.—The number of discharges during the years 1917, 1918, and 1919 was 20.21 per 1,000 of enlisted men, 8.20 of officers, 19.67 of the total. Fractures caused the discharge of 7.99 per 1,000, penetrating wounds 4.20, deleterious gases 2.73, and multiple wounds 2.60.

Time lost.—The total number of days lost as a result of wounds treated in hospital was 16,837,943, a noneffective rate of 44.08 per 1,000 men. Fractures caused more than one-fourth of the total, or 4,596,111, a noneffective rate of 12.03. Penetrating wounds stood second, with a loss of 3,640,842, or 9.53; and deleterious gases third, with 2,945,269, or 7.71.

TABLE 1.—*Admissions, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Diagnoses—Absolute numbers and ratios per 1,000.*

Diagnoses.	Officers.		Enlisted men.								Total officers and men.	
			White.		Colored.		Color not stated.		Total.			
Mean strength (annual 1918).	46,854		936,589		63,090		No strength.		999,680		1,046,534	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
Dislocation	4	0.09	50	0.05	1	0.02	8	.....	59	0.06	63	0.06
Contusion	31	.66	555	.59	17	.27	97	.....	669	.67	700	.67
Concussion	49	1.05	600	.64	9	.14	164	.....	773	.77	822	.79
Crushing	9	.19	18	.02	3	.05	19	.....	40	.04	49	.05
Decapitation	.....	.....	1	.00	.....	.....	1	.....	2	.00	2	.00
Exhaustion and exposure	15	.32	146	.16	1	.02	33	.....	180	.18	195	.19
Foreign body, traumatic	1	.02	32	.03	.....	.....	6	.....	38	.04	39	.04
Fractures	998	21.30	19,909	21.26	352	5.58	4,013	.....	24,274	24.28	25,272	24.14
Gases, deleterious	2,603	55.55	54,770	58.48	1,259	19.96	11,920	.....	67,949	67.96	70,552	67.41
Gunshot wound, character of wound not specified	22	.47	472	.50	6	.10	301	.....	779	.78	801	.77
Sprain of joint	31	.66	617	.66	11	.17	89	.....	717	.72	748	.71
Strain	6	.13	128	.14	2	.03	15	.....	145	.15	151	.14
Traumatic amputation	12	.26	552	.59	8	.13	118	.....	678	.68	690	.66
Wound, contused	32	.68	910	.97	25	.40	159	.....	1,094	1.09	1,126	1.08
Wound, incised	1	.02	66	.07	2	.03	13	.....	81	.08	82	.08
Wound, lacerated	1,516	32.36	36,070	38.51	677	10.73	8,286	.....	45,033	45.05	46,549	44.47
Wound, punctured	8	.17	224	.24	5	.08	55	.....	284	.28	292	.28
Wound, extensive	.....	.....	6	.01	.....	.....	4	.....	10	.01	10	.01
Wound, multiple	725	15.47	13,390	14.30	185	2.93	3,992	.....	17,567	17.57	18,292	17.48
Wound, penetrating	1,551	33.10	32,043	34.21	539	8.54	8,241	.....	40,823	40.84	42,374	40.49
Wound perforating	499	10.65	10,684	11.41	187	2.96	1,901	.....	12,772	12.78	13,271	12.68
Wound, character and cause not stated	20	.43	231	.25	6	.10	248	.....	485	.49	505	.48
Others traumatic	65	1.39	988	1.05	23	.36	428	.....	1,439	1.44	1,504	1.44
Total	8,198	174.97	172,462	184.14	3,318	52.59	40,111	.....	215,891	215.96	224,089	214.12

TABLE 2.—*Deaths in hospitals, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Diagnoses—Absolute numbers and ratios per 1,000.*

Diagnoses.	Officers.		Enlisted men. White.		Colored.		Color not stated.		Total.		Total officers and men.	
Mean strength (annual, 1918)	46,854		936,589		63,090		No strength.		999,680		1,046,534	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
Dislocation												
Contusion			2	0.00			1		3	0.00	3	0.00
Concussion			4	.00			7		11	.01	11	.01
Crushing	9	0.19	3	.00	1	0.02	12		16	.02	25	.02
Decapitation			1	.00			1		2	.00	2	.00
Exhaustion and exposure			1	.00			1		2	.00	2	.00
Foreign body, traumatic			1	.00					1	.00	1	.00
Fractures	117	2.50	1,686	1.80	24	.38	924		2,634	2.63	2,751	2.63
Gases, deleterious	28	.60	854	.91	13	.21	326		1,193	1.19	1,221	1.17
Gunshot wound, character of wound not specified	3	.06	55	.06			70		125	.13	128	.12
Traumatic amputation	2	.04	45	.05			37		82	.08	84	.08
Wound, contused	1	.02	4	.00					4	.00	5	.00
Wound, incised												
Wound, lacerated	12	.26	249	.27	5	.08	144		398	.40	410	.39
Wound, punctured			1	.00			2		3	.00	3	.00
Wound, extensive			2	.00			4		6	.01	6	.01
Wound, multiple	142	3.03	1,650	1.76	16	.25	1,394		3,060	3.06	3,202	3.06
Wound, penetrating	245	5.23	2,566	2.74	30	.48	2,135		4,731	4.73	4,976	4.75
Wound, perforating	46	.98	392	.42	3	.05	182		577	.58	623	.60
Wound, character and cause not stated	3	.06	11	.01			72		83	.08	86	.08
Others, traumatic	9	.19	52	.06	1	.02	90		143	.15	152	.15
Total	617	13.17	7,579	8.09	93	1.47	5,402		13,074	13.08	13,691	13.08

TABLE 3.—*Discharges, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Diagnoses—Absolute numbers and ratios per 1,000.*

Diagnoses.	Officers.		Enlisted men. White.		Colored.		Color not stated.		Total.		Total officers and enlisted men.	
Mean strength (annual, 1918)	46,854		936,589		63,090		No strength.		999,680		1,046,534	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
Dislocation			10	0.01					10	0.01	10	0.01
Contusion			5	.01					5	.01	5	.00
Concussion			19	.02			1		20	.02	20	.02
Crushing	1	0.02	7	.01					7	.01	8	.01
Decapitation												
Exhaustion and exposure												
Foreign body, traumatic												
Fractures	79	1.69	7,752	8.28	98	1.55	428		8,278	8.28	8,357	7.99
Gases, deleterious	138	2.95	2,617	2.79	24	.38	78		2,719	2.72	2,857	2.73
Gunshot wound, missile not specified			1	.00			1		2	.00	2	.00
Strain			3	.00					3	.00	3	.00
Traumatic amputation	1	.02	107	.11	2	.03	3		112	.11	113	.11
Wound, contused			10	.01					10	.01	10	.01
Wound, incised			2	.00					2	.00	2	.00
Wound, lacerated	14	.30	718	.77	15	.24	30		763	.76	777	.74
Wound, punctured	1	.02	4	.00			1		5	.01	6	.01
Wound, extensive			1	.00			1		2	.00	2	.00
Wound, multiple	36	.77	2,521	2.69	36	.57	124		2,681	2.68	2,717	2.60
Wound, penetrating	83	1.77	3,971	4.24	47	.75	293		4,311	4.31	4,394	4.20
Wound, perforating	13	.28	878	.94	14	.22	12		904	.90	917	.88
Wound, character and cause not stated			9	.01			6		15	.02	15	.01
Others, traumatic	18	.38	331	.35	9	.14	15		355	.36	373	.36
Total	384	8.20	18,966	20.25	245	3.88	993		20,204	20.21	20,588	19.67

TABLE 4.—*Days lost in hospital, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Diagnoses—Absolute numbers and noneffective ratios per 1,000.*

	Officers.		Enlisted men.								Total officers and enlisted men.	
			White.		Colored.		Color not stated.		Total.			
Mean strength (annual, 1918)	46,854		936,589		63,090		No strength.		999,680		1,046,534	
Diagnoses.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.
Dislocation	203	0.01	4,985	0.01	8	0.00	475	....	5,468	0.01	5,671	0.01
Contusion	943	.06	23,560	.07	607	.03	3,972	....	28,139	.08	29,082	.08
Concussion	2,569	.15	24,467	.07	265	.01	6,410	....	31,142	.09	33,711	.09
Crushing	4	.00	2,102	.01	197	.01	607	....	2,906	.01	2,910	.01
Exhaustion and exposure	284	.02	4,376	.01	29	.00	1,577	....	5,982	.02	6,266	.02
Foreign body, traumatic	2	.00	2,106	.01	7	.00	59	....	2,172	.01	2,174	.01
Fractures	174,570	10.21	4,057,753	11.87	53,637	2.33	310,151	....	4,421,541	12.12	4,596,111	12.03
Gases, deleterious	114,838	6.72	2,391,720	7.00	54,972	2.39	383,739	....	2,830,431	7.76	2,945,269	7.71
Strain	342	.02	5,825	.02	140	.01	557	....	6,522	.02	6,864	.02
Traumatic amputation	810	.05	53,457	.16	851	.04	6,000	....	60,308	.17	61,118	.16
Wound:												
Contused	1,302	.08	33,734	.10	637	.03	4,088	....	38,459	.11	39,761	.10
Incised	219	.01	3,169	.01	218	.01	420	....	3,807	.01	4,026	.01
Lacerated	67,067	3.92	1,848,841	5.41	33,541	1.46	253,246	....	2,135,628	5.85	2,202,695	5.77
Punctured	563	.03	12,548	.04	214	.01	1,683	....	14,445	.04	15,008	.04
Extensive	....	....	301	.00	....	....	3	....	304	.00	304	.00
Multiple	71,551	4.18	1,714,890	5.02	23,159	1.01	168,411	....	1,906,460	5.22	1,978,011	5.18
Penetrating	123,967	7.25	3,165,477	9.26	45,198	1.96	306,200	....	3,516,875	9.64	3,640,842	9.53
Perforating	38,899	2.27	944,229	2.76	13,002	.56	111,849	....	1,069,080	2.93	1,107,979	2.90
Character and cause not stated	624	.04	18,615	.05	546	.02	3,713	....	22,874	.06	23,498	.06
Others, traumatic	6,356	.37	112,624	.33	1,889	.08	15,774	....	130,287	.36	136,643	.36
Total	605,113	35.38	14,424,779	42.20	229,117	9.95	1,578,934	....	16,232,830	44.49	16,837,943	44.08

TABLE 5.—*Invalided home, battle injuries, American Expeditionary Forces, 1917 and 1918—Officers and enlisted men.*

Diagnoses (mean strength, annual, 1918).	Number of cases.	Per cent of total cases.	Diagnoses (mean strength, annual, 1918).	Number of cases.	Per cent of total cases.
Dislocations	20	31.75	Wound, contused	71	6.31
Contusions	82	4.71	Wound, incised	10	12.20
Concussion	62	7.54	Wound, lacerated	5,164	11.09
Crushing	10	21.41	Wound, punctured	57	19.52
Decapitation	....	....	Wound, extensive	....	....
Exhaustion and exposure	17	8.72	Wound, multiple	7,047	38.53
Foreign body, traumatic	11	28.21	Wound, penetrating	12,897	30.44
Fractures	15,542	61.50	Wound, perforating	3,392	25.56
Gases, deleterious	6,414	9.09	Wound, character and cause not stated	138	27.33
Gunshot wound, missile not specified	137	17.10	Other, traumatic	462	20.52
Strain	15	9.94			
Traumatic amputation	265	38.41	Total	51,813	23.12

RATES FOR THE AGGREGATE NUMBER OF MEN IN EUROPE.

It is apparent, however, that in considering the number of casualties in the American Expeditionary Forces the total number of men should be considered rather than the average annual number. According to the information obtained from General Headquarters of the American Expeditionary Forces, the total number of men arriving in France up to the last of December, 1918, was 2,039,329. For the purpose for hospitalization and of military replacements, it is apparent that this number should be considered rather than the average annual strength, 1,046,534 for the year 1918, for which the above rates were quoted.

Strength.—Table No. 6 shows the strength available each month for the various arms of the service. The data in this table have been compiled from two sources: First, the strength on the last day of each month as furnished by the office of The Adjutant General; and, second, the increments for each month as obtained from General Headquarters of the American Expeditionary Forces. To ascertain the number of men available during any month, to the strength on the last day of the preceding month was added the number of men received during the month in question. Thus, to obtain the February strength, to the number of men present on the last day of January was added the number of men received during the month of February.

Admissions and deaths.—In estimating the admission and deaths of the various arms of the service by months in Tables 7 and 8, the strength for the various months has been used, but in estimating the total loss for the war, the aggregate number of men received during the entire period. Of the total men who arrived in France, 109.88 out of each 1,000 were admitted to hospital as a result of battle injuries, and 6.71 died in hospital.

TABLE 6.—*Strength, by arms of service, American Expeditionary Forces, 1918.*

Arm of service.	January.	February.	March.	April.	May.	June
Aviation	15,282	22,120	36,679	39,189	42,863	44,88
Infantry[1]	74,079	77,960	103,050	156,950	292,679	395,499
Cavalry	1,666	1,673	4,310	6,343	6,474	6,546
Artillery[2]	38,168	40,347	40,777	48,668	82,395	122,484
Tank Corps		45	45	1,036	1,397	1,549
Engineers[3]	35,475	42,721	57,619	70,834	94,800	120,336
Medical Department	16,678	18,120	22,036	27,037	39,788	58,831
Quartermaster[4]	23,797	25,612	35,141	43,805	60,041	82,584
Ordnance	1,212	1,291	2,698	4,192	5,136	7,625
Signal Corps	5,483	5,890	12,634	8,955	13,273	17,986
Others[5]	2,807	5,648	7,029	11,434	15,971	17,248
Total	214,647	241,427	322,018	418,443	654,817	875,571

Arm of service.	July.	August.	September.	October.	November.	December.	Total.
Aviation	61,821	66,758	75,336	76,457	79,370	63,502	79,980
Infantry[1]	498,445	598,212	716,794	751,027	679,382	628,524	906,722
Cavalry	6,663	6,546	6,655	6,261	6,279	5,673	6,593
Artillery[2]	179,941	225,590	242,412	287,572	294,919	288,736	305,557
Tank Corps	2,024	3,066	4,754	9,015	9,113	10,039	9,820
Engineers[3]	162,856	186,541	219,681	241,285	246,174	241,627	245,463
Medical Department	80,767	96,063	127,231	135,175	153,549	149,272	147,343
Quartermaster[4]	113,358	147,529	191,898	202,401	212,000	215,958	220,760
Ordnance	10,835	14,625	19,054	21,888	21,877	22,707	22,265
Signal Corps	25,028	28,976	33,219	35,412	34,504	35,381	37,671
Others[5]	39,057	50,231	73,425	121,886	203,919	250,401	57,155
Total	1,180,795	1,424,137	1,710,459	1,888,379	1,941,086	1,911,820	2,039,329

For explanatory footnote see Table 7.

TABLE 7.—*Admissions (battle wounds), by month and by arm of service, American Expeditionary Forces, 1917 and 1918.*

ABSOLUTE NUMBERS.

Arm of service.	Months, 1918.											1917 and not specified in 1918.	Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	To Nov. 11.		
Aviation	4	5	7	9	11	29	51	56	78	119	55	10	434
Infantry [1]	111	192	1,332	1,199	4,022	6,617	28,748	18,700	39,250	75,752	18,252	1,372	195,547
Cavalry	1	1	3	1	2	4	11	20	18	22	6	4	93
Artillery [2]	7	31	294	234	492	570	1,361	1,173	1,243	3,777	971	128	10,281
Tank Corps	....	1	.....	2	2	1	5	3	168	217	8	3	410
Engineers [3]	6	7	123	177	220	534	1,392	773	1,467	2,164	586	84	7,533
Medical Department	3	5	33	82	153	231	469	366	545	1,505	346	44	3,782
Quartermaster [4]	5	11	16	21	49	79	234	236	325	779	231	41	2,027
Ordnance	1	2	3	4	9	12	15	6	12	35	12	1	112
Signal Corps	2	.....	25	15	48	112	171	222	362	848	143	19	1,967
Others [5]	2	11	8	21	40	86	257	139	351	752	207	29	1,903
Total	142	266	1,844	1,765	5,048	8,275	32,714	21,694	43,819	85,970	20,817	1,735	224,089

RATIOS PER 1,000.

Aviation	0.26	0.23	0.19	0.23	0.26	0.65	0.83	0.84	1.04	1.56	0.69	.....	5.43
Infantry [1]	1.50	2.46	12.93	7.64	13.74	16.73	57.67	31.26	54.77	100.86	26.87	.....	215.66
Cavalry	.60	.60	.70	.16	.31	.61	1.65	3.06	2.70	3.51	.96	.....	14.11
Artillery [2]	.18	.77	7.21	4.81	5.97	4.65	7.56	5.20	5.13	13.14	3.29	.....	33.65
Tank Corps	....	22.22	.....	1.93	1.43	.65	2.47	.98	35.34	24.07	.88	.....	41.75
Engineers [3]	.17	.16	2.14	2.50	2.32	4.44	8.55	4.14	6.68	8.97	2.38	.....	30.69
Medical Department	.18	.28	1.50	3.03	3.85	3.93	5.81	3.81	4.28	11.14	2.25	.....	25.67
Quartermaster [4]	.21	.43	.46	.48	.82	.96	2.06	1.60	1.69	3.85	1.09	.....	9.18
Ordnance	.83	1.55	1.11	.95	1.75	1.57	1.38	.41	.63	1.60	.55	.....	5.03
Signal Corps	.36	.....	1.98	1.68	3.62	6.23	6.83	7.66	10.90	23.95	4.14	.....	52.22
Others [5]	.71	1.95	1.14	1.84	2.50	4.99	6.58	2.77	4.78	6.17	1.02	.....	33.30
Total	.66	1.10	5.73	4.22	7.71	9.45	27.71	15.23	25.62	45.53	10.72	.....	109.88

[1] Includes machine gun.
[2] Includes artillery (all) and antiaircraft machine gun.
[3] Includes Transportation Corps, Light Railway, and Construction and Forestry.
[4] Includes ammunition train, Motor Transport Corps, stevedores, and supply train.
[5] Includes division headquarters and headquarters troop, train headquarters, and military police, Staffs Executive Service Army, Service Corps, and arm of service unknown.

TABLE 8.—*Deaths in hospital (battle wounds), by month of wound and by arm of service, American Expeditionary Forces, 1917 and 1918.*

ABSOLUTE NUMBERS.

Arm of service.	Months, 1918.											1917 and not specified in 1918.	Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	To Nov. 11.		
Aviation		3	1	1	1	5	8	8	8	10	6		51
Infantry [1]	8	21	59	84	268	268	1,472	1,017	2,308	4,875	1,153	42	11,575
Cavalry						1			1	1			3
Artillery [2]	2	6	4	17	14	13	100	63	119	319	73	6	736
Tank Corps				1					8	7			16
Engineers [3]		3	4	11	8	21	47	56	88	101	50	4	393
Medical Department			3	6	9	11	23	15	46	101	22	2	238
Quartermaster [4]	1			1	6	4	15	16	40	52	17	4	156
Ordnance						1			1	3	1		6
Signal Corps	1				2	2	5	14	20	65	8	1	118
Others [5]		1		1	2	6	67	22	99	150	60		399
Total	12	34	71	122	310	332	1,737	1,211	2,729	5,684	1,390	59	13,691

RATIOS PER 1,000.

Aviation		0.14	0.03	0.03	0.02	0.11	0.13	0.12	0.11	0.13	0.08	0.64
Infantry [1]	0.11	.27	.57	.54	.92	.68	2.95	1.70	3.22	6.49	1.70	12.77
Cavalry						.15			.15	.16		.46
Artillery [2]	.05	.15	.10	.35	.17	.11	.56	.28	.49	1.11	.25	2.41
Tank Corps				.97					1.68	.78		1.63
Engineers [3]		.07	.07	.16	.08	.17	.29	.30	.40	.42	.20	1.60
Medical Department			.14	.22	.23	.19	.28	.16	.36	.75	.14	1.62
Quartermaster [4]	.04			.02	.10	.05	.13	.11	.21	.26	.08	.71
Ordnance						.13			.05	.14	.05	.27
Signal Corps	.18				.15	.11	.20	.48	.60	1.84	.23	3.13
Others [5]		.18		.09	.13	.35	1.72	.44	1.23	1.23	.29	6.98
Total	.06	.14	.22	.29	.47	.38	1.47	.85	1.59	3.01	.72	6.71

[1] Includes machine gun.
[2] Includes artillery (all) and antiaircraft machine gun.
[3] Includes Transportation Corps, Light Railway, and Construction and Forestry.
[4] Includes ammunition train, Motor Transport Corps, stevedores, and supply train.
[5] Includes division headquarters and headquarters troop, train headquarters, and military police, Staffs Executive Service Army, Service Corps, and arm of service unknown.

LOSSES, BY ARMS OF SERVICE AND DATE.

Arms of service.—Table 9 shows the relative losses for the arms of service. It will be observed that the Infantry sustained the heaviest loss, 215.66 per 1,000 of all infantrymen who arrived in France being wounded. The Signal Corps was second, with admission rate of 52.22. The death rate for the Infantry was also the highest, being 12.77 per 1,000 men, while the Signal Corps was second, with 3.13.

TABLE 9.—*Arm of service, battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and ratios per 1,000.*

Arm of service.	Accumulated maximum strength.	Admissions.		Deaths.		Case mortality.
		Number.	Ratio.	Number.	Ratio.	
Aviation	79,980	434	5.43	51	0.64	11.75
Infantry	906,722	195,547	215.66	11,575	12.77	5.92
Cavalry	6,593	93	14.11	3	.46	3.23
Artillery	305,557	10,281	33.65	736	2.41	7.15
Tank Corps	9,820	410	41.75	16	1.63	3.90
Engineers	245,463	7,533	30.69	393	1.60	5.22
Medical Department	147,343	3,782	25.67	238	1.62	6.29
Quartermaster	220,760	2,027	9.18	156	.71	7.70
Ordnance	22,265	112	5.03	6	.27	5.36
Signal Corps	37,671	1,967	52.22	118	3.13	6.00
Others	57,155	1,903	33.30	399	6.98	20.96
Total	2,039,329	224,089	109.88	13,691	6.71	6.11

Losses, by days.—It is important that the Medical Department know, for the purpose of estimating needs of hospitalization, the total and proportionate losses by days. This information is also of value in connection with the question of military replacements. Tables 10 and 11 have consequently been prepared to show for the Infantry, Artillery, Engineers, Medical Department, Machine Gun, and the other branches of the service grouped, the total of all admissions and deaths by months through the month of May, and by days thereafter up to and including November 11. The largest number of admissions that occurred as a result of battle casualties on any one day was for the 29th of September, when 8,358 men were admitted to hospital. The greatest number of deaths as a result of wounds was from wounds received on October 4, the number being 418.

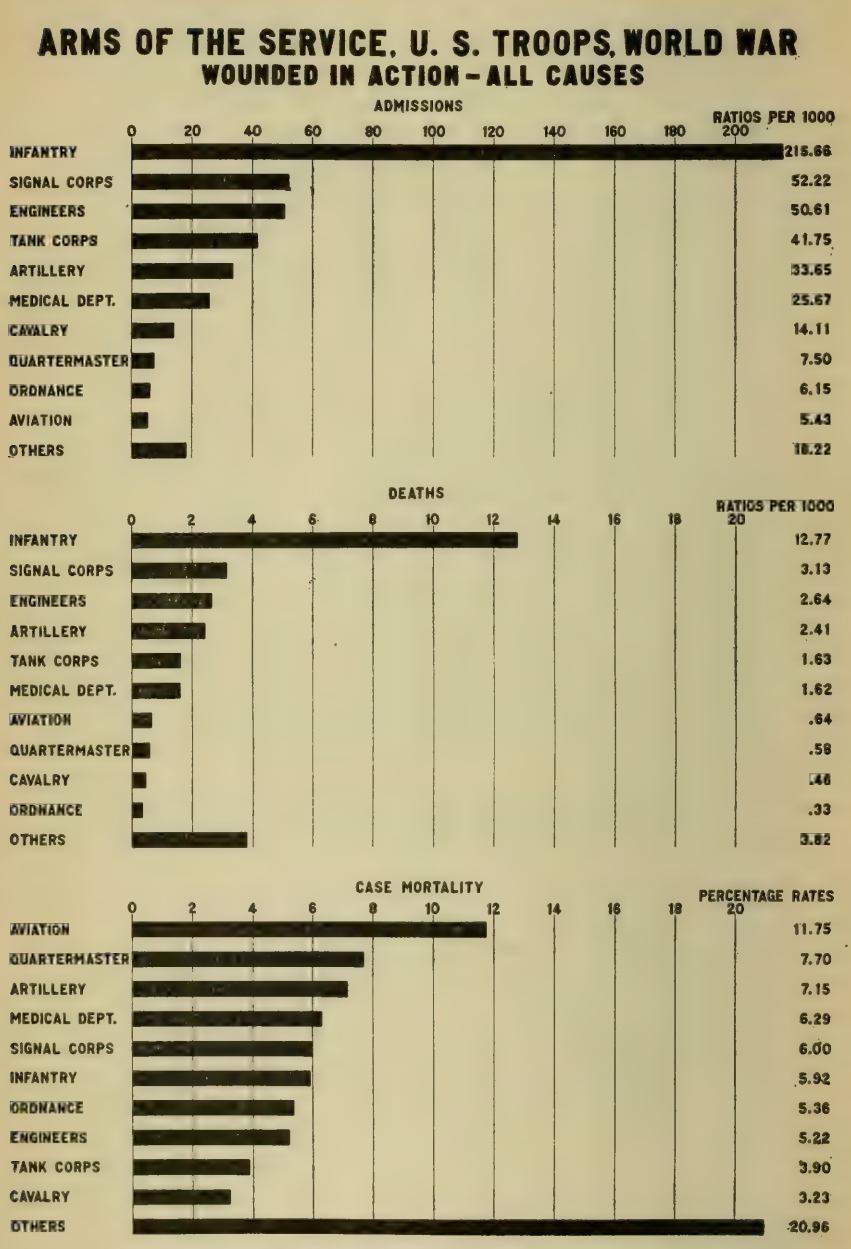

ARMS OF THE SERVICE. U. S. TROOPS. WORLD WAR
WOUNDED IN ACTION – ALL CAUSES
ADMISSIONS
RATIOS PER 1000
0 20 40 60 80 100 120 140 160 180 200
INFANTRY 215.66
SIGNAL CORPS 52.22
ENGINEERS 50.61
TANK CORPS 41.75
ARTILLERY 33.65
MEDICAL DEPT. 25.67
CAVALRY 14.11
QUARTERMASTER 7.50
ORDNANCE 6.15
AVIATION 5.43
OTHERS 18.22
DEATHS
RATIOS PER 1000
0 2 4 6 8 10 12 14 16 18 20
INFANTRY 12.77
SIGNAL CORPS 3.13
ENGINEERS 2.64
ARTILLERY 2.41
TANK CORPS 1.63
MEDICAL DEPT. 1.62
AVIATION .64
QUARTERMASTER .58
CAVALRY .46
ORDNANCE .33
OTHERS 3.82
CASE MORTALITY
PERCENTAGE RATES
0 2 4 6 8 10 12 14 16 18 20
AVIATION 11.75
QUARTERMASTER 7.70
ARTILLERY 7.15
MEDICAL DEPT. 6.29
SIGNAL CORPS 6.00
INFANTRY 5.92
ORDNANCE 5.36
ENGINEERS 5.22
TANK CORPS 3.90
CAVALRY 3.23
OTHERS 20.96

FIG. 2.

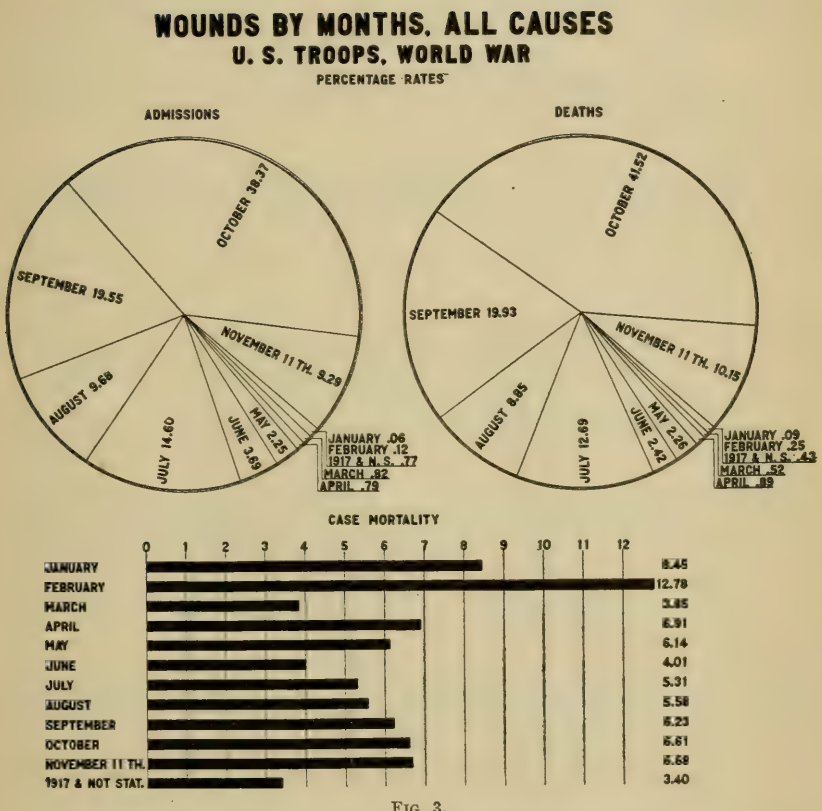


FIG. 3.

[The months shown hereon are for 1918 unless otherwise stated.]

TABLE 10.—*Admissions, battle injuries, arm of service, by months and days, American Expeditionary Forces, 1917 and 1918—Absolute numbers and proportional (ratios per 1,000 of monthly admissions) admissions, by days, for each month.*

Month.	Infantry.		Artillery.		Engineers.		Medical.		Machine Gun.		Others.		Total.	
	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.
January (31 days)	.....	101	.....	7	.....	6	.....	3	.....	10	.....	15	.....	142
February (29 days)	.....	187	.....	29	.....	7	.....	5	.....	5	.....	33	.....	266
March (31 days)	.....	1,296	.....	289	.....	123	.....	33	.....	36	.....	67	.....	1,844
April (30 days)	.....	1,144	.....	230	.....	177	.....	82	.....	55	.....	77	.....	1,765
May (31 days)	.....	3,838	.....	476	.....	220	.....	153	.....	184	.....	177	.....	5,048
June 0	0.80	5	3.58	2	.....	.....	4.33	1	5.70	2	8.96	3	1.57	13
1	22.66	142	35.84	20	5.62	3	21.65	5	39.89	14	38.81	13	23.81	197
2	52.03	326	48.39	27	52.43	28	43.29	10	54.13	19	50.75	17	51.60	427
3	16.44	103	17.92	10	39.33	21	17.32	4	34.19	12	8.96	3	18.49	153
4	42.13	264	53.76	30	29.96	16	21.65	5	25.64	9	32.84	11	40.48	335
5	36.55	229	50.18	28	24.34	13	12.99	3	19.94	7	32.84	11	35.17	291
6	38.30	240	39.43	22	71.16	38	12.99	3	39.89	14	32.84	11	39.64	328
7	37.50	235	32.26	18	73.03	39	60.61	14	37.04	13	26.87	9	39.64	328
8	25.85	162	26.88	15	33.71	18	47.62	11	45.58	16	23.88	8	27.79	230
9	73.09	458	125.45	70	80.52	43	95.24	22	51.28	18	44.78	15	75.65	626
10	23.78	149	46.59	26	33.71	18	30.30	7	14.25	5	11.94	4	25.26	209
11	35.59	223	35.84	20	31.84	17	47.62	11	54.13	19	38.81	13	36.62	303
12	18.35	115	23.30	13	48.69	26	51.95	12	14.25	5	41.79	14	22.36	185
13	18.51	116	21.51	12	29.96	16	25.97	6	17.09	6	23.88	8	19.82	164
14	41.01	257	35.84	20	119.85	64	51.95	12	48.43	17	44.78	15	46.53	385
15	110.76	694	82.44	46	125.47	67	155.84	36	62.68	22	98.51	33	108.52	898
16	41.97	263	37.63	21	18.73	10	4.33	1	31.34	11	53.73	18	39.15	324
17	28.09	176	55.56	31	24.34	13	21.65	5	37.04	13	35.82	12	30.21	250
18	43.57	273	57.35	32	26.22	14	56.28	13	51.28	18	62.69	21	44.83	371
19	68.46	429	57.35	32	29.96	16	69.26	16	51.28	18	35.82	12	63.20	523
20	21.39	134	3.58	2	16.85	9	12.99	3	19.94	7	14.93	5	19.34	160
21	24.74	155	3.58	2	7.49	4	.....	.....	17.09	6	20.90	7	21.03	174
22	24.26	152	19.71	11	3.75	2	17.32	4	28.49	10	14.93	5	22.24	184
23	12.29	77	7.17	4	7.49	4	4.33	1	37.04	13	14.93	5	12.57	104
24	71.98	451	14.34	8	9.36	5	43.29	10	71.23	25	56.72	19	62.60	518
25	19.63	123	12.54	7	9.36	5	8.66	2	31.34	11	8.96	3	18.25	151
26	11.33	71	17.92	10	7.49	4	12.99	3	25.64	9	14.93	5	12.33	102
27	14.84	93	16.13	9	9.36	5	25.97	6	17.09	6	23.88	8	15.35	127
28	9.26	58	5.38	3	9.36	5	12.99	3	14.25	5	32.84	11	10.27	85
29	6.86	43	7.17	4	11.24	6	4.33	1	2.85	1	26.87	9	7.73	64
30	7.98	50	5.38	3	9.36	5	4.33	1	.....	.....	20.90	7	7.98	66
Total	1,000.00	6,266	1,000.00	558	999.98	534	1,000.04	231	1,000.01	351	1,000.09	335	1,000.03	8,275

July	0	.29	8	.76	1					.64	1	5.04	4	.43	14
	1	8.76	238	.76	1	12.93	18	10.66	5	3.18	5	7.56	6	8.35	273
	2	8.32	226	4.58	6	11.49	16	8.53	4	5.72	9	20.15	16	8.47	277
	3	10.64	289	4.58	6	8.62	12	17.06	8	6.35	10	20.15	16	10.42	341
	4	12.00	326	9.92	13	1.44	2	23.45	11	12.71	20	10.08	8	11.62	380
	5	4.42	120	3.05	4	11.49	16	8.53	4	8.89	14	15.11	12	5.20	170
	6	3.46	94	8.39	11	5.75	8	2.13	1	1.91	3	8.82	7	3.79	124
	7	4.27	116	3.05	4	4.31	6	4.26	2	2.54	4	3.78	3	4.13	135
	8	3.09	84	2.29	3	.72	1			2.54	4	8.82	7	3.03	99
	9	4.45	121	9.92	13	3.59	5	12.79	6	3.18	5	11.34	9	4.86	159
	10	6.44	175	2.29	3	7.90	11	8.53	4	2.54	4	7.56	6	6.21	203
	11	3.39	92	3.81	5	.72	1	6.40	3	3.81	6	3.78	3	3.36	110
	12	3.39	92	3.05	4	2.16	3	4.26	2			8.82	7	3.30	108
	13	3.83	104	4.58	6	6.47	9	6.40	3	1.91	3	7.56	6	4.00	131
	14	7.58	206	14.49	19	20.83	29	4.26	2	7.62	12	12.59	10	8.50	278
	15	76.10	2,068	177.73	233	188.22	262	87.42	41	95.30	150	95.72	76	86.51	2,830
	16	36.87	1,002	61.02	80	91.24	127	42.64	20	33.04	52	59.19	47	40.59	1,328
	17	28.34	770	62.55	82	85.49	119	23.45	11	27.32	43	40.30	32	32.31	1,057
	18	99.32	2,699	41.19	54	91.95	128	72.49	34	85.13	134	83.12	66	95.22	3,115
	19	83.83	2,278	41.19	54	71.12	99	34.12	16	78.78	124	62.97	50	80.12	2,621
	20	85.01	2,310	83.91	110	76.87	107	83.16	39	69.89	110	74.31	59	83.60	2,735
	21	68.85	1,871	78.57	103	50.29	70	81.02	38	71.79	113	73.05	58	68.87	2,253
	22	65.69	1,785	62.55	82	70.40	98	78.89	37	78.78	124	60.45	48	66.45	2,174
	23	40.19	1,092	61.02	80	35.92	50	51.17	24	47.65	75	34.01	27	41.21	1,348
	24	30.47	828	35.85	47	15.80	22	44.78	21	30.50	48	15.11	12	29.90	978
	25	26.50	720	22.88	30	16.52	23	40.51	19	30.50	48	23.93	19	26.26	859
	26	40.52	1,101	44.24	58	32.33	45	53.30	25	43.20	68	54.16	43	40.96	1,340
	27	32.13	873	10.68	14	15.80	22	23.45	11	23.51	37	20.15	16	29.74	973
	28	48.13	1,308	46.53	61	16.52	23	36.25	17	42.57	67	40.30	32	46.10	1,508
	29	52.15	1,417	42.72	56	15.09	21	36.25	17	54.00	85	40.30	32	49.76	1,628
	30	55.94	1,520	32.04	42	10.78	15	49.04	23	71.16	112	41.56	33	53.34	1,745
	31	45.67	1,241	19.83	26	17.24	24	44.78	21	53.37	84	30.23	24	43.41	1,420
	Total	1,000.04	27,174	1,000.02	1,311	1,000.00	1,392	999.98	469	1,000.03	1,574	1,000.00	794	1,000.02	32,714
Aug.	0	.17	3			1.29	1	8.20	3	.79	1	2.90	2	.46	10
	1	76.24	1,329	45.49	53	20.70	16	51.91	19	62.30	79	47.83	33	70.48	1,529
	2	29.72	518	19.74	23	10.35	8	16.39	6	28.39	36	21.74	15	27.93	696
	3	34.88	608	18.03	21	15.52	12	16.39	6	28.39	36	23.19	16	32.22	699
	4	63.22	1,102	12.02	14	29.75	23	32.79	12	31.55	40	24.64	17	55.68	1,208
	5	58.80	1,025	18.88	22	84.09	65	19.13	7	46.53	59	26.09	18	55.13	1,196
	6	36.14	630	28.33	33	76.33	59	30.05	11	20.50	26	27.54	19	35.86	778
	7	43.66	761	14.59	17	68.56	53	30.05	11	52.05	66	26.09	18	42.68	926
	8	65.68	1,145	48.93	57	55.63	43	92.90	34	104.89	133	124.64	86	69.05	1,498
	9	51.80	903	51.50	60	34.93	27	65.57	24	56.78	72	50.72	35	51.67	1,121
	10	54.96	958	45.49	53	65.98	51	51.91	19	49.68	63	44.93	31	54.16	1,175
	11	30.46	531	50.64	59	34.93	27	35.52	13	38.64	49	33.33	23	32.36	702
	12	21.05	367	31.76	37	42.69	33	24.59	9	24.45	31	49.28	34	23.55	511
	13	18.76	327	53.22	62	20.70	16	19.13	7	14.98	19	42.03	29	21.20	460
	14	17.84	311	54.08	63	29.75	23	46.45	17	14.98	19	23.19	16	20.70	449
	15	28.34	494	19.74	23	16.82	13	54.64	20	14.98	19	26.09	18	27.06	587
	16	33.85	590	36.91	43	46.57	36	54.64	20	29.18	37	34.78	24	34.57	750

TABLE 10.—*Admissions, battle injuries, arm of service, by months and days, American Expeditionary Forces, 1917 and 1918—Absolute numbers and proportional (ratios per 1,000 of monthly admissions) admissions, by days, for each month*—Continued.

Month.	Infantry.		Artillery.		Engineers.		Medical.		Machine Gun.		Others.		Total.	
	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.
Aug. 17	34.71	605	31.76	37	45.28	35	38.25	14	29.18	37	26.09	18	34.39	746
18	17.78	310	41.20	48	18.11	14	54.64	20	22.87	29	24.64	17	20.19	438
19	17.09	298	26.61	31	15.52	12	21.86	8	17.35	22	27.54	19	17.98	390
20	13.77	240	33.48	39	20.70	16	32.79	12	14.98	19	37.68	26	16.23	352
21	19.62	342	60.94	71	20.70	16	24.59	9	14.20	18	43.48	30	22.40	486
22	11.99	209	55.79	65	27.17	21	16.39	6	12.62	16	24.64	17	15.40	334
23	18.07	315	36.91	43	28.46	22	10.93	4	19.72	25	21.74	15	19.54	424
24	14.00	244	18.03	21	23.29	18	13.66	5	8.68	11	8.70	6	14.06	305
25	14.57	254	15.45	18	24.58	19	10.93	4	5.52	7	15.94	11	14.43	313
26	16.18	282	25.75	30	12.94	10	16.39	6	10.25	13	21.74	15	16.41	356
27	20.02	349	18.88	22	24.58	19	16.39	6	10.25	13	27.54	19	19.73	428
28	25.99	453	24.89	29	23.29	18	21.86	8	32.33	41	17.39	12	25.86	561
29	34.08	594	18.03	21	15.52	12	30.05	11	47.32	60	31.88	22	33.19	720
30	39.30	685	23.18	27	19.40	15	21.86	8	49.68	63	20.29	14	37.43	812
31	37.29	650	19.74	23	25.87	20	19.13	7	85.96	109	21.74	15	37.98	824
Total	1,000.00	17,432	999.99	1,165	1,000.00	773	999.98	366	999.97	1,268	1,000.04	690	999.98	21,694
Sept. 0	.62	23	.82	1	1.36	2	.....	.....	.43	1	2.24	3	.68	30
1	18.13	669	13.99	17	10.22	15	34.86	19	17.46	41	11.18	15	17.71	776
2	14.71	543	26.34	32	23.18	34	12.84	7	15.33	36	8.94	12	15.15	664
3	6.23	230	23.05	28	18.40	27	9.17	5	13.20	31	8.20	11	7.58	332
4	8.40	310	22.22	27	25.90	38	16.51	9	13.63	32	14.16	19	9.93	435
5	14.09	520	24.69	30	59.99	88	20.18	11	27.26	64	14.16	19	16.71	732
6	24.50	904	67.49	82	41.58	61	31.19	17	23.85	56	37.26	50	26.70	1,170
7	16.69	616	48.56	59	25.22	37	56.88	31	26.41	62	30.55	41	19.31	846
8	7.70	284	40.33	49	15.00	22	11.01	6	8.09	19	13.41	18	9.08	398
9	8.45	312	27.16	33	10.22	15	9.17	5	8.94	21	12.67	17	9.20	403
10	6.12	226	6.58	8	5.45	8	7.34	4	4.68	11	8.94	12	6.14	269
11	5.72	211	24.69	30	12.95	19	5.50	3	7.24	17	11.92	16	6.76	296
12	64.60	2,384	52.67	64	55.90	82	34.86	19	46.85	110	44.71	60	62.05	2,719
13	25.96	958	25.51	31	10.22	15	18.35	10	30.24	71	18.63	25	25.33	1,110
14	27.40	1,011	37.04	45	27.27	40	29.36	16	29.39	69	32.79	44	27.96	1,225
15	24.63	909	25.51	31	17.72	26	25.69	14	39.61	93	40.98	55	25.74	1,128
16	24.74	913	32.92	40	32.72	48	42.20	23	36.20	85	26.83	36	26.13	1,145
17	16.23	599	13.99	17	21.13	31	45.87	25	22.15	52	17.88	24	17.07	748
18	13.41	495	27.16	33	13.63	20	23.85	13	17.04	40	20.12	27	14.33	628
19	11.71	432	15.64	19	11.59	17	14.68	8	9.80	23	11.18	15	11.73	514
20	11.71	432	12.35	15	13.63	20	12.84	7	7.24	17	18.63	25	11.78	516
21	7.43	274	19.75	24	10.22	15	16.51	9	4.68	11	12.67	17	7.99	350

	22	10.46	386	17.28	21	21.13	31	14.68	8	7.67	18	15.65	21	11.07	485
	23	10.70	395	22.22	27	13.63	20	3.67	2	7.67	18	17.14	23	11.07	485
	24	10.62	392	37.04	45	12.27	18	22.02	12	9.80	23	28.32	38	12.05	528
	25	14.58	538	34.57	42	17.72	26	9.17	5	29.81	70	35.77	48	16.64	729
	26	77.26	2,851	83.95	102	65.44	96	66.06	36	55.79	131	67.81	91	75.47	3,307
	27	88.34	3,260	39.51	48	79.07	116	77.06	42	89.86	211	49.18	66	85.42	3,743
	28	116.69	4,306	41.98	51	38.85	57	75.23	41	126.92	298	106.56	143	111.73	4,896
	29	198.28	7,317	72.43	88	184.73	271	154.13	84	169.93	399	148.29	199	190.74	8,358
	30	113.87	4,202	62.55	76	103.61	152	99.08	54	92.84	218	113.26	152	110.77	4,854
	Total	999.98	36,902	999.99	1,215	999.95	1,467	999.96	545	1,000.00	2,348	1,000.03	1,342	1,000.02	43,819
Oct.	0	31.73	2,251	41.56	151	50.37	109	51.16	77	27.45	132	64.47	188	33.83	2,908
	1	52.38	3,716	35.51	129	54.07	117	49.17	74	47.62	229	57.61	168	51.56	4,433
	2	33.20	2,355	50.10	182	45.75	99	63.79	96	26.20	126	54.53	159	35.09	3,017
	3	33.70	2,391	40.46	147	32.81	71	51.83	78	34.31	165	40.47	118	34.55	2,970
	4	71.63	5,082	55.60	202	57.76	125	63.79	96	85.88	413	73.05	213	71.32	6,131
	5	52.23	3,705	57.80	210	75.79	164	64.45	97	59.26	285	54.18	158	53.73	4,619
	6	39.88	2,829	46.24	168	23.11	50	35.88	54	34.73	167	38.41	112	39.32	3,380
	7	27.81	1,973	33.86	123	22.64	49	20.60	31	28.28	136	30.86	90	27.94	2,402
	8	51.58	3,659	40.46	147	36.97	80	23.26	35	33.89	163	35.32	103	48.70	4,187
	9	53.00	3,760	21.47	78	35.58	77	41.20	62	40.76	196	32.24	94	49.63	4,267
	10	49.82	3,534	44.59	162	34.20	74	42.52	64	43.25	208	36.69	107	48.26	4,149
	11	42.57	3,020	35.51	129	13.40	29	25.25	38	39.09	188	20.92	61	40.30	3,465
	12	35.65	2,529	22.85	83	16.64	36	37.21	56	26.41	127	30.52	89	33.97	2,920
	13	29.31	2,079	25.60	93	26.34	57	29.90	45	30.57	147	28.46	83	29.13	2,504
	14	55.22	3,917	40.19	146	61.00	132	30.56	46	60.30	290	46.64	136	54.29	4,667
	15	50.28	3,567	28.63	104	43.90	95	37.87	57	48.66	234	30.86	90	48.24	4,147
	16	42.59	3,021	25.32	92	23.10	50	34.55	52	30.78	148	29.49	86	40.12	3,449
	17	39.23	2,783	23.67	86	53.14	115	28.57	43	42.42	204	40.81	119	38.97	3,350
	18	36.38	2,581	27.25	99	58.22	126	25.91	39	47.83	230	24.69	72	36.61	3,147
	19	16.96	1,203	17.07	62	21.72	47	17.94	27	16.64	80	14.75	43	17.01	1,462
	20	14.98	1,063	17.62	64	33.73	73	16.61	25	15.18	73	20.58	60	15.80	1,358
	21	15.14	1,074	14.59	53	31.42	68	14.62	22	20.17	97	17.83	52	15.89	1,366
	22	12.42	881	12.94	47	13.40	29	10.63	16	11.64	56	12.00	35	12.38	1,064
	23	15.51	1,100	25.05	91	12.01	26	27.24	41	22.67	109	21.60	63	16.63	1,430
	24	13.90	986	24.50	89	15.25	33	19.93	30	17.88	86	16.80	49	14.81	1,273
	25	10.98	779	14.31	52	12.01	26	19.93	30	15.60	75	8.92	26	11.49	988
	26	10.19	723	24.22	88	10.63	23	17.94	27	11.44	55	14.40	42	11.14	958
	27	12.67	899	38.81	141	18.02	39	21.26	32	15.60	75	21.26	62	14.52	1,248
	28	11.70	830	34.96	127	14.33	31	17.28	26	16.43	79	16.12	47	13.26	1,140
	29	8.73	619	19.54	71	15.71	34	15.95	24	10.40	50	16.46	48	9.84	846
	30	11.22	796	24.22	88	23.57	51	12.62	19	12.06	58	23.66	69	12.57	1,081
	31	17.45	1,238	35.51	129	13.40	29	30.56	46	26.62	128	25.38	74	19.12	1,644
	Total	1,000.04	70,943	1,000.01	3,633	999.99	2,164	999.98	1,505	1,000.02	4,809	999.98	2,916	1,000.02	85,970
Nov.	0	2.27	39	2.06	2	6.83	4	.....	.....	.94	1	6.04	4	2.40	50
	1	185.52	3,188	215.24	209	257.68	151	222.54	77	247.19	264	179.76	119	192.53	4,008
	2	96.49	1,658	95.78	93	66.55	39	115.61	40	95.51	102	87.61	58	95.59	1,990
	3	96.02	1,650	60.76	59	66.55	39	86.71	30	99.25	106	93.66	62	93.48	1,946
	4	120.34	2,068	92.69	90	90.44	53	115.61	40	128.28	137	110.27	73	118.22	2,461

TABLE 10.—*Admissions, battle injuries, arm of service, by months and days, American Expeditionary Forces, 1917 and 1918—Absolute numbers and proportional (ratios per 1,000 of monthly admissions) admissions, by days, for each month*—Continued.

Month.	Infantry.		Artillery.		Engineers.		Medical.		Machine Gun.		Others.		Total.	
	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.
Nov. 5	79.67	1,369	62.82	61	63.14	37	69.36	24	78.65	84	87.61	58	78.45	1,633
6	67.50	1,160	69.00	67	61.43	36	49.13	17	60.86	65	61.93	41	66.58	1,386
7	57.44	987	85.48	83	61.43	36	54.91	19	50.56	54	60.42	40	58.56	1,219
8	44.17	759	90.63	88	58.02	34	57.80	20	32.77	35	67.98	45	47.12	981
9	47.08	809	72.09	70	52.90	31	43.35	15	28.09	30	64.95	43	47.94	998
10	105.21	1,808	69.00	67	87.03	51	80.92	28	100.19	107	84.59	56	101.70	2,117
11	98.29	1,689	84.45	82	127.99	75	104.05	36	77.72	83	95.17	63	97.42	2,028
Total	1,000.00	17,184	1,000.00	971	999.99	586	999.99	346	1,000.01	1,068	999.99	662	999.99	20,817
1917 and not specified in 1918	.....	1,290	.....	110	.....	84	.....	44	.....	85	.....	122	.....	1,735
Grand total	.....	183,757	.....	9,994	.....	7,533	.....	3,782	.....	11,790	.....	7,233	.....	224,089

TABLE 11.—*Deaths in hospital, arm of the service, by month and day of wound, American Expeditionary Forces, 1917 and 1918—Absolute numbers, and proportional (ratios per 1,000 of monthly admissions) deaths, by days, for each month.*

Month.	Infantry.		Artillery.		Engineers.		Medical.		Machine Gun.		Others.		Total.	
	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.
January (31 days)	8		2								2		12	
February (29 days)	21		6		3						4		34	
March (31 days)	57		4		4		3		2		1		71	
April (30 days)	84		17		11		6				4		122	
May (31 days)	258		14		8		9		10		11		310	
June 0											1	52.63	1	3.01
1	6	23.53	1	76.92							2	105.26	9	27.10
2	7	27.45							2	153.85	2	105.26	11	33.13
3	14	54.90	1	76.92	1	47.62			1	76.92	1	52.63	18	54.22
4	5	19.61									1	52.63	6	18.07
5	3	11.76	1	76.92									4	12.05
6	25	98.04	1	76.92	2	95.24			1	76.92			29	87.35
7	12	47.06	1	76.92	3	142.86	1	90.91	2	153.85	1	52.63	20	60.24
8	5	19.61	1	76.92	3	142.86			1	76.92			10	30.12
9	13	50.98					1	90.91					14	42.17
10	4	15.69	2	153.85									6	18.07
11	3	11.76			1	47.62							4	12.05
12	7	27.45					1	90.91					8	24.10
13	5	19.61			3	142.86	1	90.91	1	76.92	2	105.26	12	36.15
14	11	43.14	1	76.92	2	95.24	2	181.82	1	76.92			17	51.21
15	17	66.67			1	47.62	2	181.82			1	52.63	21	63.25
16	29	113.73			1	47.62							30	90.36
17	8	31.37											8	24.10
18	13	50.98	3	230.77	1	47.62			1	76.92	1	52.63	19	57.23
19	9	35.29					1	90.91	1	76.92			11	33.13
20	5	19.61			1	47.62							6	18.07
21	3	11.76			1	47.62					1	52.63	5	15.06
22	5	19.61			1	47.62	1	90.91					7	21.08
23	4	15.69									1	52.63	5	15.06
24	16	62.75							2	153.85			18	54.22
25	8	31.37											8	24.10
26	4	15.69					1	90.91			2	105.26	7	21.08
27	2	7.84	1	76.92									3	9.04
28	6	23.53									2	105.26	8	24.10
29	2	7.84									1	52.63	3	9.04
30	4	15.69											4	12.04
Total	255	1,000.01	13	999.98	21	1,000.02	11	1,000.01	13	999.99	19	999.97	332	1,000.00

TABLE 11.—*Deaths in hospital, arm of the service, by month and day of wound, American Expeditionary Forces, 1917 and 1918—Absolute numbers, and proportional (ratios per 1,000 of monthly admissions) deaths, by days, for each month*—Continued.

Month.	Infantry.		Artillery.		Engineers.		Medical.		Machine Gun.		Others.		Total.	
	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.
July 0														
1	20	14.01			3	63.83							23	13.24
2	15	10.50			1	21.28	1	43.48					17	9.79
3	11	7.70											11	6.33
4	17	11.90	2	20.20									19	10.94
5	2	1.40			1	21.28					1	10.42	4	2.30
6	3	2.10											3	1.73
7	4	2.80			1	21.28							5	2.88
8	4	2.80											4	2.30
9	4	2.80					1	43.48					5	2.88
10	4	2.80			1	21.28							5	2.88
11	2	1.40					1	43.48					3	1.73
12	4	2.80	1	10.10									5	2.88
13	3	2.10	1	10.10	3	63.83	1	43.48					8	4.61
14	9	6.30	3	30.30	2	42.55	1	43.48	1	22.73			16	9.21
15	122	85.43	11	111.11	1	21.28	3	130.43	3	68.18	9	93.75	149	85.78
16	61	42.72	6	60.61	3	63.83	1	43.48	2	45.46	5	52.08	78	44.90
17	42	29.41	2	20.20	3	63.83					2	20.83	49	28.21
18	114	79.83	2	20.20	1	21.28	2	86.96	4	90.91	5	52.08	128	73.69
19	148	103.64	8	80.81	6	127.66			4	90.91	7	72.92	173	99.60
20	135	94.54	9	90.91	5	106.38	2	86.96	4	90.91	10	104.17	165	94.99
21	103	72.13	7	70.71	3	63.83	2	86.96	3	68.18	6	62.50	124	71.39
22	85	59.52	10	101.01	2	42.55	2	86.96	5	113.64	14	145.83	118	67.94
23	53	37.12	7	70.71	4	85.11	1	43.48	3	68.18	6	62.50	74	42.60
24	38	26.61	2	20.20	1	21.28	1	43.48			2	20.83	44	25.33
25	44	30.81	5	50.51	1	21.28			4	90.91	5	52.08	59	33.97
26	50	35.02	6	60.61	3	63.83	1	43.48			1	10.42	61	35.12
27	64	44.82	1	10.10					1	22.73	2	20.83	68	39.15
28	53	37.12	6	60.61					2	45.46	1	10.42	62	35.69
29	79	55.32	1	10.10					3	68.18	10	104.17	93	53.54
30	86	60.23	7	70.71			1	43.48	2	45.46	4	41.68	100	57.58
31	49	34.22	2	20.20	2	42.55	2	86.96	3	68.18	6	62.50	64	36.84
Total	1,428	1,000.00	99	1,000.01	47	1,000.02	23	1,000.03	44	1,000.02	96	1,000.01	1,737	1,000.02
Aug. 0	1	1.03											1	.83
1	80	82.56							2	41.67	3	50.00	85	70.19
2	41	42.31	1	15.87	1	17.86			2	41.67	1	16.67	46	37.99
3	19	19.61							2	41.67			21	17.34
4	49	50.57	1	15.87	1	17.86					5	83.33	56	46.21

5	62	63.99	2	31.75	1	17.86	1	66.67	2	41.67	5	83.33	73	60.28
6	32	33.02	4	63.49	5	89.29	2	133.33			2	33.33	45	37.16
7	54	55.73			3	53.58	1	66.67			1	16.67	59	48.72
8	89	91.85	4	63.49	6	107.14	2	133.33	5	104.17	8	133.33	114	94.14
9	46	47.47			1	17.86	1	66.67	1	20.83	4	66.67	53	43.77
10	63	65.02	2	31.75	2	35.71	1	66.67			1	16.67	69	56.98
11	42	43.34	4	63.49	2	35.71			1	20.83	3	50.00	52	42.94
12	16	16.51	2	31.75	2	35.71			2	41.67	1	16.67	23	18.99
13	17	17.54	6	95.23					2	41.67	1	16.67	26	21.47
14	19	19.61	3	47.62	2	35.71	1	66.67	4	83.33			29	23.95
15	26	26.83	3	47.62					2	41.67	1	16.67	32	26.43
16	19	19.61	2	31.75	3	53.58			1	20.83	2	33.33	27	22.30
17	21	21.67	4	63.49	7	125.00			1	20.83	3	50.00	36	29.73
18	12	12.38	3	47.62	2	35.71			2	41.67	1	16.67	20	16.52
19	13	13.42			1	17.86	1	66.67	3	62.50	5	83.33	23	18.99
20	9	9.29	2	31.75	1	17.86							12	9.91
21	16	16.51	3	47.62	3	53.58	1	66.67	1	20.83	4	66.67	28	23.12
22	12	12.38	3	47.62	2	35.71			1	20.83			18	14.86
23	14	14.45	2	31.75	1	17.86			4	83.33			21	17.34
24	7	7.23	1	15.87	2	35.71	1	66.67	1	20.83			12	9.91
25	20	20.64	2	31.75							2	33.33	24	19.82
26	9	9.29	3	47.62					1	20.83			13	10.73
27	9	9.29	1	15.87	4	71.43	1	66.67			1	16.67	16	13.21
28	32	33.03	2	31.75	1	17.86			3	62.50	1	16.67	29	32.21
29	39	40.25	1	15.87	2	35.71	1	66.67	1	20.83	3	50.00	47	38.81
30	34	35.09	1	15.87					1	20.83			36	29.73
31	47	48.51	1	15.87	1	17.86	1	66.67	3	62.50	2	33.33	55	45.42
Total	969	1,000.03	63	1,000.00	56	1,000.02	15	1,000.03	48	999.99	60	1,000.01	1,211	1,000.03
Sept. 0	1	.46									1	5.71	2	.73
1	38	17.54			1	11.36	1	21.74	2	14.08	2	11.43	44	16.12
2	23	10.62	5	44.64	1	11.36			2	14.08	3	17.14	34	12.46
3	8	3.69	1	8.93					1	7.04			10	3.66
4	11	5.08	3	26.79	4	45.46			1	7.04			19	6.96
5	27	12.47	4	35.71	5	56.82	1	21.74	6	42.25			43	15.76
6	58	26.78	8	71.43	9	102.27	1	21.74	5	35.21	7	40.00	88	32.25
7	38	17.54	3	26.79	3	34.09			2	14.08			46	16.86
8	11	5.08	1	8.93					1	7.04	2	11.43	15	5.50
9	20	9.23	5	44.64	1	11.36			1	7.04			27	9.89
10	17	7.85	3	26.79	1	11.36							21	7.70
11	18	8.31	3	26.79	3	34.09			2	14.08	5	28.57	31	11.36
12	188	86.80	4	35.71	9	102.27			6	42.25	14	80.00	221	80.98
13	81	37.40	2	17.86			1	21.74	7	49.30	2	11.43	93	34.08
14	81	37.40	3	26.79	4	45.46			6	42.25	7	40.00	101	37.01
15	55	25.39	1	8.93	5	56.82	1	21.74	7	49.30	9	51.43	78	28.58
16	36	16.62	3	26.79			1	21.74	4	28.17	8	45.71	52	19.05
17	25	11.54	2	17.86			7	152.17	3	21.13	6	34.29	43	15.76
18	31	14.31	2	17.86					1	7.04	1	5.71	35	12.83
19	22	10.16	2	17.86							2	11.43	26	9.53
20	10	4.62	1	8.93	1	11.36					5	28.57	17	6.23
21	12	5.54	3	26.79							2	11.43	17	6.23

TABLE 11.—*Deaths in hospital, arm of the service, by month and day of wound, American Expeditionary Forces, 1917 and 1918—Absolute numbers, and proportional (ratios per 1,000 of monthly admissions) deaths, by days, for each month*—Continued.

Month.	Infantry.		Artillery.		Engineers.		Medical.		Machine Gun.		Others.		Total.	
	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.	No.	Ratio.
Sept. 22	17	7.85	2	17.86	3	34.09	1	21.74	.....	.....	4	22.86	27	9.89
23	22	10.16	2	17.86	.....	.....	.....	.....	1	7.04	3	17.14	28	10.26
24	31	14.31	3	26.79	.....	.....	1	21.74	1	7.04	4	22.86	40	14.66
25	39	18.01	10	89.29	1	11.36	.....	.....	7	49.30	8	45.71	65	23.82
26	188	86.80	14	125.00	7	79.54	6	130.44	11	77.46	6	34.29	232	85.01
27	181	83.56	7	62.50	9	102.27	5	108.70	10	70.42	12	68.57	224	82.08
28	263	121.42	4	35.71	2	22.73	4	86.96	22	154.93	26	148.57	321	117.63
29	327	150.97	2	17.86	8	90.92	8	173.91	21	147.89	17	97.14	383	140.34
30	287	132.50	9	80.36	11	125.00	8	173.91	12	84.51	19	108.57	346	126.79
Total	2,166	1,000.01	112	1,000.05	88	999.99	46	1,000.01	142	999.97	175	999.99	2,729	1,000.01
Oct. 0	86	18.94	6	1.94	2	19.80	4	39.60	3	8.96	9	30.30	110	19.35
1	258	56.83	15	4.84	3	29.70	8	79.21	21	62.69	17	57.24	322	56.65
2	154	33.92	24	7.74	4	39.60	2	19.80	8	23.88	22	74.07	214	37.65
3	142	31.28	10	3.23	4	39.60	9	89.11	7	20.90	12	40.40	184	32.37
4	344	75.77	16	5.16	6	59.41	3	29.70	26	77.61	23	77.44	418	73.54
5	280	61.67	17	5.48	6	59.41	6	59.41	17	50.75	24	80.81	350	61.58
6	212	46.70	12	3.87	2	19.80	7	69.31	18	53.73	15	50.51	266	46.80
7	143	31.50	11	3.55	.....	.....	1	9.90	15	44.78	10	33.67	180	31.67
8	235	51.76	18	5.81	2	19.80	4	39.60	10	29.85	12	40.40	281	49.44
9	218	48.02	7	2.26	6	59.41	4	39.60	10	29.85	15	50.51	260	45.74
10	264	58.15	16	5.16	4	39.60	1	9.90	15	44.78	16	53.87	316	55.59
11	196	43.17	14	4.52	3	29.70	2	19.80	20	59.70	10	33.67	245	43.10
12	173	38.11	7	2.26	3	29.70	9	89.11	8	23.88	9	30.30	209	36.77
13	129	28.41	8	2.58	4	39.60	4	39.60	10	29.85	8	26.94	163	28.68
14	246	54.19	17	5.48	3	29.70	2	19.80	20	59.70	8	26.94	296	52.08
15	250	55.07	8	2.58	6	59.41	3	29.70	23	68.66	13	43.77	303	53.31
16	198	43.61	8	2.58	7	69.31	.....	.....	7	20.90	6	20.20	226	39.76
17	137	30.18	8	2.58	2	19.80	3	29.70	14	41.79	12	40.40	176	30.96
18	129	28.41	4	1.29	2	19.80	1	9.90	12	35.82	4	13.47	152	26.74
19	71	15.64	5	1.61	2	19.80	.....	.....	1	2.99	1	3.37	80	14.07
20	58	12.78	6	1.94	2	19.80	3	29.70	2	5.97	5	16.84	76	13.37
21	82	18.06	4	1.29	6	59.41	1	9.90	7	20.90	7	23.57	107	18.82
22	68	14.98	3	.97	1	9.90	1	9.90	2	5.97	5	16.84	80	14.07
23	76	16.74	3	.97	3	29.70	6	59.41	14	41.79	4	13.47	106	18.65
24	64	14.10	4	1.29	1	9.90	2	19.80	3	8.96	4	13.47	78	13.72
25	55	12.11	2	.65	1	9.90	5	49.50	6	17.91	2	6.73	71	12.49
26	51	11.23	6	1.94	2	19.80	3	29.70	4	11.94	5	16.84	71	12.49
27	44	9.69	12	3.87	6	59.41	.....	.....	5	14.93	4	13.47	71	12.49

28	47	10.35	12	3.87	.....	.....	1	9.90	9	26.87	3	10.10	72	12.67
29	27	5.95	6	1.94	4	39.60	2	19.80	2	5.97	4	13.47	45	7.92
30	35	7.71	7	2.26	1	9.90	1	9.90	8	23.88	3	10.10	55	9.68
31	68	14.98	14	4.52	3	29.70	3	29.70	8	23.88	5	16.84	101	17.77
Total	4,540	1,000.01	310	1,000.03	101	999.97	101	999.96	335	1,000.04	297	1,000.02	5,684	999.99
Nov. 0	.....	.....	1	13.70	.....	.....	.....	.....	.....	.....	2	21.74	3	2.16
1	239	221.09	19	260.27	14	280.00	6	272.73	15	208.33	28	304.35	321	230.94
2	96	88.81	4	54.79	3	60.00	5	227.27	10	138.89	5	54.35	123	88.49
3	95	87.88	7	95.89	2	40.00	1	45.45	10	138.89	5	54.35	120	86.33
4	133	123.03	8	109.59	6	120.00	2	90.91	9	125.00	9	97.83	167	120.14
5	106	98.06	5	68.49	2	40.00	2	90.91	4	55.56	3	32.61	122	87.77
6	59	54.58	2	27.40	4	80.00	2	90.91	7	97.22	3	32.61	77	55.40
7	48	44.40	5	68.49	1	20.00	.....	.....	4	55.56	4	43.48	62	44.60
8	51	47.18	14	191.78	2	40.00	.....	.....	.....	.....	5	54.35	72	51.80
9	44	40.70	2	27.40	4	80.00	.....	.....	1	13.89	1	10.87	52	37.41
10	89	82.33	2	27.40	4	80.00	3	136.36	7	97.22	13	141.30	118	84.89
11	121	111.93	4	54.79	8	160.00	1	45.45	5	69.44	14	152.17	153	110.07
Total	1,081	999.99	73	999.99	50	1,000.00	22	999.99	72	1,000.00	92	1,001.01	1,390	1,000.00
1917 and not specified in 1918	40	.....	6	.....	4	.....	2	.....	2	.....	5	.....	59	.....
Grand total	10,907	.....	719	.....	393	.....	238	.....	668	.....	766	.....	13,691	.....

Infantry losses, by months.—Tables 12 and 13 have been prepared to show for each Infantry regiment for which the deaths as a result of wounds were 10 or more, the losses by months from June to November, with such losses as occurred in 1917 and the other months of 1918 grouped under the one term of "others." Such wounds, or deaths as the result of wounds, which occur in Infantry regiments other than those enumerated are shown at the bottom of table combined under the general term "others." The total number of infantrymen treated in Army hospitals for battle wounds in Europe (other than in Russia) was 183,757 and the total number of deaths was 10,907. The greatest number of admissions for wounds was for the 18th Infantry, from which regiment 4,985 men were admitted. The greatest number of deaths as a result of wounds received in action also occurred for the 18th Infantry, the number being 306.

TABLE 12.—*Admissions, battle injuries, Infantry regiments, by months, American Expeditionary Forces, 1917 and 1918—Absolute numbers.*

Infantry regiments.	1918						Others, 1917 and 1918.	Total.
	June.	July.	August.	September.	October.	November.*		
Not stated	13	47	15	45	114	26	10	270
Fourth	61	911	65	116	1,443	30	15	2,641
Sixth	40	55	320	300	748	272	16	1,751
Seventh	201	963	57	74	1,360	34	15	2,704
Ninth	494	1,515	120	374	938	701	226	4,368
Eleventh	32	89	70	582	1,042	540	9	2,364
Sixteenth	480	1,404	107	173	1,403	222	383	4,172
Eighteenth	457	1,299	121	120	1,500	156	1,332	4,985
Twenty-third	903	1,004	90	292	1,002	497	141	3,929
Twenty-sixth	647	1,419	113	176	1,405	142	432	4,334
Twenty-eighth	560	1,488	129	159	1,239	189	778	4,542
Thirtieth	84	889	228	62	1,036	11	12	2,322
Thirty-fourth	.....	1	.....	7	158	129	5	300
Thirty-eighth	36	881	407	67	1,234	37	14	2,676
Thirty-ninth	3	261	540	536	588	16	12	1,956
Forty-seventh	6	503	672	410	572	22	11	2,196
Fifty-first	.....	3	7	66	40	4	1	121
Fifty-third	.....	.....	6	41	72	28	.....	147
Fifty-fourth	.....	1	4	87	26	15	2	135
Fifty-fifth	.....	1	1	3	156	123	3	287
Fifty-sixth	1	3	7	10	261	329	6	617
Fifty-eighth	9	518	852	220	716	21	11	2,347
Fifty-ninth	4	788	579	323	696	26	11	2,427
Sixtieth	42	27	13	194	695	222	8	1,201
Sixty-first	13	15	27	122	889	350	9	1,425
Sixty-fourth	1	.....	.....	2	139	143	1	286
One hundred and first	301	721	32	149	817	98	346	2,464
One hundred and second	190	1,090	42	252	1,084	186	873	3,717
One hundred and third	200	979	47	393	345	232	334	2,530
One hundred and fourth	86	891	52	162	598	180	214	2,183
One hundred and fifth	1	44	97	804	692	7	9	1,654
One hundred and sixth	3	48	250	1,012	442	14	19	1,788
One hundred and seventh	3	24	157	893	743	23	12	1,855
One hundred and eighth	5	27	93	888	894	23	7	1,937
One hundred and ninth	7	710	487	1,158	573	195	9	3,139
One hundred and tenth	1	748	478	982	460	77	23	2,769
One hundred and eleventh	2	397	602	615	605	158	8	2,387
One hundred and twelfth	2	331	603	289	483	242	6	1,956
One hundred and thirteenth	.....	8	47	98	562	8	5	728
One hundred and fourteenth	.....	27	26	365	1,119	18	8	1,563
One hundred and fifteenth	1	8	27	100	691	14	4	845
One hundred and sixteenth	2	14	48	40	1,003	21	4	1,132
One hundred and seventeenth	7	28	42	277	1,291	16	15	1,676
One hundred and eighteenth	5	21	24	390	1,400	27	14	1,881
One hundred and nineteenth	4	53	138	785	849	15	7	1,851
One hundred and twentieth	11	45	166	827	942	27	6	2,024
One hundred and twenty-fifth	45	283	872	119	844	33	15	2,211
One hundred and twenty-sixth	23	125	946	64	1,086	28	18	2,290
One hundred and twenty-seventh	33	368	1,094	213	998	73	15	2,794
One hundred and twenty-eighth	25	83	1,309	172	1,284	140	24	3,037
One hundred and twenty-ninth	2	28	83	94	1,111	30	8	1,356

TABLE 12.—*Admissions, battle injuries, Infantry regiments, by months, American Expeditionary Forces, 1917 and 1918—Absolute numbers*—Concluded.

Infantry regiments.	1918						Others, 1917 and 1918.	Total.
	June.	July.	August.	September.	October.	November.*		
One hundred and thirtieth	4	18	24	51	329	270	6	702
One hundred and thirty-first	4	125	756	186	709	159	11	1,950
One hundred and thirty-second	5	134	197	61	834	51	4	1,286
One hundred and thirty-seventh	8	26	18	779	282	31	13	1,157
One hundred and thirty-eighth	3	71	45	773	252	75	9	1,228
One hundred and thirty-ninth	1	4	34	841	233	12	3	1,128
One hundred and fortieth	10	16	41	996	344	52	4	1,463
One hundred and forty-first	1	.....	4	8	531	11	.....	555
One hundred and forty-second	.....	2	3	12	837	14	5	873
One hundred and forty-third	.....	.....	.....	5	242	6	.....	253
One hundred and forty-fourth	.....	1	.....	11	302	4	.....	318
One hundred and forty-fifth	.....	4	13	409	211	325	8	970
One hundred and forty-sixth	2	3	18	460	158	52	5	698
One hundred and forty-seventh	1	5	15	575	272	117	4	989
One hundred and forty-eighth	.....	4	22	504	285	421	12	1,248
One hundred and sixty-fifth	24	1,077	206	201	1,014	127	430	3,079
One hundred and sixty-sixth	196	833	181	141	512	87	62	2,012
One hundred and sixty-seventh	197	1,354	158	273	638	82	95	2,797
One hundred and sixty-eighth	173	1,222	128	345	719	34	428	3,049
Three hundred and fifth	28	20	518	415	640	358	11	1,990
Three hundred and sixth	11	15	417	384	503	133	6	1,469
Three hundred and seventh	147	39	182	835	569	131	7	1,910
Three hundred and eighth	65	30	711	496	735	71	29	2,137
Three hundred and ninth	3	3	15	221	1,082	161	14	1,499
Three hundred and tenth	3	5	3	382	794	138	11	1,336
Three hundred and eleventh	.....	3	5	232	180	653	5	1,081
Three hundred and twelfth	2	3	4	180	769	79	6	1,043
Three hundred and thirteenth	.....	2	4	642	409	273	8	1,338
Three hundred and fourteenth	1	.....	3	419	221	404	5	1,053
Three hundred and fifteenth	.....	1	4	500	334	364	7	1,210
Three hundred and sixteenth	1	3	3	589	467	573	5	1,641
Three hundred and seventeenth	1	42	58	42	440	182	5	770
Three hundred and eighteenth	1	12	20	101	653	91	5	883
Three hundred and nineteenth	2	11	24	234	503	304	7	1,085
Three hundred and twentieth	2	16	64	278	599	312	5	1,276
Three hundred and twenty-first	.....	1	4	27	87	161	.....	280
Three hundred and twenty-second	.....	1	1	2	51	187	.....	242
Three hundred and twenty-third	.....	.....	1	6	17	87	2	113
Three hundred and twenty-fifth	2	13	27	117	1,151	23	5	1,338
Three hundred and twenty-sixth	.....	21	86	114	1,061	25	2	1,309
Three hundred and twenty-seventh	5	27	42	154	1,241	26	6	1,501
Three hundred and twenty-eighth	5	16	12	299	957	27	7	1,323
Three hundred and fifty-third	.....	2	15	315	411	371	4	1,118
Three hundred and fifty-fourth	.....	2	219	236	533	443	13	1,446
Three hundred and fifty-fifth	1	5	302	230	248	390	1	1,177
Three hundred and fifty-sixth	.....	4	11	169	446	404	7	1,041
Three hundred and fifty-seventh	.....	6	22	515	574	218	8	1,343
Three hundred and fifty-eighth	.....	3	11	768	547	184	9	1,522
Three hundred and fifty-ninth	.....	4	8	567	307	486	10	1,382
Three hundred and sixtieth	1	.....	7	449	262	641	10	1,370
Three hundred and sixty-first	1	.....	7	390	507	116	4	1,025
Three hundred and sixty-second	1	15	11	553	440	120	8	1,148
Three hundred and sixty-third	.....	1	3	448	370	183	7	1,012
Three hundred and sixty-fourth	.....	2	3	504	301	74	7	891
Three hundred and sixty-fifth	.....	2	12	52	267	307	4	644
Three hundred and sixty-sixth	.....	1	18	130	41	133	2	325
Three hundred and sixty-eighth	1	1	22	210	48	10	1	293
Three hundred and sixty-ninth	39	134	52	591	283	23	28	1,150
Three hundred and seventieth	4	20	15	372	256	128	7	802
Three hundred and seventy-first	7	12	13	412	498	17	5	964
Three hundred and seventy-second	16	17	12	190	370	9	4	618
Others[1]	241	571	286	799	1,679	722	336	4,634
Total	6,266	27,174	17,432	36,902	70,943	17,842	7,198	183,757

[1] All regiments with less than 10 deaths grouped as "Others."

*Includes 658 cases with indefinite date grouped in Table 10 under date "Not specified."

TABLE 13.—*Deaths in hospitals, Infantry regiments, by month of wound, American Expeditionary Forces, 1917 and 1918—Absolute numbers.*

Infantry regiments.	1918						Others (1917 and 1918).	Total.
	June.	July.	August.	September.	October.	*November.		
Not stated		6		8	8	3	2	27
Fourth	7	39	2	1	98	1		148
Sixth		5	5	19	52	25	3	109
Seventh	4	51	1		94			150
Ninth	17	78	8	24	53	55	17	252
Eleventh	3	2	5	37	62	35		144
Sixteenth	19	91	5	12	92	8	30	257
Eighteenth	13	82	4	4	125	5	73	306
Twenth-third	52	52	1	23	74	45	12	259
Twenty-sixth	17	74	8	10	89	7	41	246
Twenty-eighth	13	102	4	6	73	8	46	252
Thirtieth	10	27	31	2	73	1		144
Thirty-fourth					10	6		16
Thirty-eighth	1	28	17	1	93	1		141
Thirty-ninth		23	53	27	45			148
Forty-seventh		24	43	36	51			154
Fifty-first				3	8			11
Fifty-third			1	2	8			11
Fifty-fourth				12	1	1		14
Fifty-fifth					9	9	1	19
Fifty-sixth			1		9	15		25
Fifty-eighth		33	43	11	48		1	136
Fifty-ninth		33	33	16	59	1		142
Sixtieth	4	1		13	40	8		66
Sixty-first	2		2	5	48	23		80
Sixty-fourth					7	11		18
One hundred and first	4	38	2	12	55	6	18	135
One hundred and second	9	66		20	56	4	22	177
One hundred and third	13	40	1	29	13	5	19	120
One hundred and fourth	11	31	3	5	41	3	18	112
One hundred and fifth		6	9	39	30		1	85
One hundred and sixth		6	10	46	22	1	1	86
One hundred and seventh		2	7	53	50	1		113
One hundred and eighth		2	7	45	34		2	90
One hundred and ninth		30	27	78	48	8		191
One hundred and tenth		38	24	53	33	2		150
One hundred and eleventh		11	29	40	51	10	1	142
One hundred and twelfth		6	17	32	39	7		101
One hundred and thirteenth		1	6	3	33			43
One hundred and fourteenth			2	24	52	1		79
One hundred and fifteenth		1	4	11	47			63
One hundred and sixteenth		3	1	4	63			71
One hundred and seventeenth	1	1	3	26	66		2	99
One hundred and eighteenth			1	19	77	1	1	99
One hundred and nineteenth		4	7	45	47	1	1	105
One hundred and twentieth		2	9	45	56	1		113
One hundred and twenty-fifth	4	6	56	2	71		1	140
One hundred and twenty-sixth	1	3	49	1	88			142
One hundred and twenty-seventh	1	17	63	9	95	4	2	191
One hundred and twenty-eighth		5	67	13	83	23	2	193
One hundred and twenty-ninth		3	5	11	47	4	1	71
One hundred and thirtieth			6	4	27	19		56
One hundred and thirty-first	2	5	25	10	26	5	1	74
One hundred and thirty-second	2	11	15	17	45	7		97
One hundred and thirty-seventh		2		40	9			51
One hundred and thirty-eighth		6	3	57	11			77
One hundred and thirty-ninth		1	2	29	10			42
One hundred and fortieth			9	44	7			60
One hundred and forty-first			2	2	60	2		66
One hundred and forty-second					30	3		33
One hundred and forty-third					9	1		10
One hundred and forty-fourth					17			17
One hundred and forty-fifth			1	21	9	30		61
One hundred and forty-sixth			3	21	11	2		37
One hundred and forty-seventh				19	37	2		58
One hundred and forty-eighth			1	20	18	27		66
One hundred and sixty-fifth		51	7	17	68	9	11	163
One hundred and sixty-sixth	3	50	12	16	41	3	3	128
One hundred and sixty-seventh	6	85	2	18	32	5	11	159
One hundred and sixty-eighth	5	67	5	35	63	1	56	232
Three hundred and fifth	5		17	40	71	26	2	161
Three hundred and sixth		1	19	33	28	5		86
Three hundred and seventh	2		9	53	47	11		122
Three hundred and eighth	5	3	30	26	62	1		127
Three hundred and ninth			1	15	49	18	1	84
Three hundred and tenth				25	40	11		76

TABLE 13.—*Deaths in hospitals, Infantry regiments, by month of wound, American Expeditionary Forces, 1917 and 1918—Absolute numbers*—Concluded.

Infantry regiments.	1918						Others (1917 and 1918).	Total.
	June.	July.	August.	September.	October.	November. *		
Three hundred and eleventh	.....	1	1	12	47	9	.....	70
Three hundred and twelfth	.....	.....	1	9	62	4	.....	76
Three hundred and thirteenth	.....	1	2	44	17	14	.....	78
Three hundred and fourteenth	.....	.....	.....	25	17	23	.....	65
Three hundred and fifteenth	.....	.....	.....	26	30	33	.....	89
Three hundred and sixteenth	.....	.....	1	23	29	41	.....	94
Three hundred and seventeenth	.....	1	8	.....	24	16	.....	49
Three hundred and eighteenth	.....	2	2	6	36	3	.....	49
Three hundred and nineteenth	.....	2	4	20	39	28	.....	93
Three hundred and twentieth	.....	1	4	21	34	23	.....	83
Three hundred and twenty-first	.....	.....	.....	5	3	15	.....	23
Three hundred and twenty-second	.....	.....	.....	1	2	9	.....	12
Three hundred and twenty-third	.....	.....	.....	2	3	6	.....	11
Three hundred and twenty-fifth	1	.....	2	2	81	.....	.....	86
Three hundred and twenty-sixth	.....	.....	1	2	70	2	.....	75
Three hundred and twenty-seventh	.....	3	6	10	61	1	.....	81
Three hundred and twenty-eighth	.....	1	.....	8	68	1	.....	78
Three hundred and fifty-third	.....	.....	.....	33	30	34	.....	97
Three hundred and fifty-fourth	.....	.....	5	21	24	41	1	92
Three hundred and fifty-fifth	.....	.....	49	21	28	33	.....	131
Three hundred and fifty-sixth	.....	.....	.....	13	11	30	.....	54
Three hundred and fifty-seventh	.....	1	.....	48	24	17	.....	90
Three hundred and fifty-eighth	.....	1	3	55	15	13	.....	87
Three hundred and fifty-ninth	.....	.....	.....	33	7	24	.....	64
Three hundred and sixtieth	.....	.....	1	27	10	50	.....	88
Three hundred and sixth-first	.....	.....	.....	28	56	5	.....	89
Three hundred and sixty-second	.....	2	.....	26	26	9	.....	63
Three hundred and sixty-third	.....	.....	1	18	24	11	.....	54
Three hundred and sixty-fourth	.....	.....	.....	21	21	7	.....	49
Three hundred and sixty-fifth	.....	.....	1	6	12	5	.....	24
Three hundred and sixty-sixth	.....	.....	4	6	1	11	.....	22
Three hundred and sixty-eighth	.....	.....	1	13	2	.....	.....	16
Three hundred and sixty-ninth	1	6	4	28	17	2	2	60
Three hundred and seventieth	1	.....	1	3	1	12	.....	18
Three hundred and seventy-first	.....	.....	1	11	24	1	.....	37
Three hundred and seventy-second	3	2	.....	7	18	.....	.....	30
Others [1]	13	49	21	33	113	45	27	301
Total	255	1,428	969	2,166	4,540	1,116	433	10,907

[1] All regiments with less than 10 deaths grouped as "Others."

*Includes 35 deaths of uncertain dates grouped in Table 11 under date "Not specified."

Duration of treatment.—Of the 210,398 wounded men who were treated in hospital, whose wounds did not result in death, 70,175 were treated in hospital 29 days or less, the average time for this class of cases being 14.17 days; for 134,455 the average time was 98.15 days; 5,768 were remaining in hospital at the end of the calendar year 1919, and for these cases it is estimated that each had lost 435 days. In assigning this arbitrary number of days it was assumed that these cases had been admitted at various times prior to November 11. Consequently 18 days were added, thus dating them back to the median date of October 23. Probably some were admitted prior and some subsequent to this date.

Day of death.—Of the 13,691 men who died in hospital as result of wounds received in action, 355.41 out of each 1,000, or a little over one-third of them, died on the first day.

A study of Table 15 will show the proportional number which died on each day of treatment in hospital.

TABLE 14.—*Duration of treatment of cases, death excepted, battle injuries, American Expeditionary Forces, 1917 and 1918.*

Diagnosis.	Under 29 days.			Over 29 days.			Remaining 1919.[1]			Total.		
	Number of cases.	Number of days lost.	Average time.	Number of cases.	Number of days lost.	Average time.	Number of cases.	Number of days lost.	Average time.	Number of cases.	Number of days lost.	Average time.
Dislocation	21	252	12.00	37	3,244	87.68	5	2,175	435.00	63	5,671	90.02
Contusion	370	4,938	13.35	323	22,324	69.12	4	1,740	435.00	697	29,002	41.64
Concussion	435	6,144	14.12	372	25,782	69.31	4	1,740	435.00	811	33,666	41.51
Crushing	5	94	18.80	19	2,687	141.42	.....	.....	.....	24	2,781	115.88
Exhaustion and exposure	118	1,227	10.40	74	4,600	62.16	1	435	435.00	193	6,262	32.45
Foreign body, traumatic	21	202	9.62	14	647	46.21	3	1,305	435.00	38	2,154	56.68
Fractures	1,530	21,946	14.34	18,004	3,228,119	179.29	2,987	1,299,345	435.00	22,521	4,549,410	202.00
Gases, deleterious	33,253	447,100	13.45	36,074	2,480,350	68.76	4	1,740	435.00	69,331	2,929,190	42.25
Strain	74	1,193	16.12	76	5,236	68.89	1	435	435.00	151	6,864	45.46
Traumatic amputation	54	803	14.87	528	49,499	93.75	24	10,440	435.00	606	60,742	100.23
Wound:												
Contused	668	9,726	14.56	448	27,839	62.14	5	2,175	435.00	1,121	39,740	35.45
Incised	41	525	12.80	41	3,501	85.39	.....	.....	.....	82	4,026	49.10
Lacerated	19,264	285,854	14.84	26,365	1,689,156	64.07	510	221,850	435.00	46,139	2,196,860	47.61
Punctured	146	2,233	15.30	142	12,144	85.52	1	435	435.00	289	14,812	51.25
Extensive	1	9	9.00	3	291	97.00	.....	.....	.....	4	300	75.00
Multiple	2,379	34,864	14.65	12,051	1,631,261	135.36	660	287,100	435.00	15,090	1,953,225	129.44
Penetrating	8,034	117,776	14.66	28,150	2,959,372	105.13	1,214	528,090	435.00	37,398	3,605,238	96.40
Perforating	2,383	42,803	17.96	10,034	957,798	95.45	231	100,485	435.00	12,648	1,101,086	87.06
Character and cause not stated	190	1,613	8.49	196	7,322	37.36	33	14,355	435.00	419	23,290	55.58
Others, traumatic	1,188	14,990	12.62	1,504	85,558	56.89	81	35,235	435.00	2,773	135,783	48.97
Total	70,175	994,292	14.17	134,455	13,196,730	98.15	5,768	2,509,080	435.00	210,398	16,700,102	79.37

[1] 435 days accredited to each case covering the period from Oct. 23, 1918, through Dec. 31, 1919, inclusive, Oct. 23 taken as the estimated middle date of the admissions for the remaining cases

TABLE 15.—*Deaths in hospitals, battle injuries, American Expeditionary Forces, 1917 and 1918—Day of treatment on which death occurred—Diagnoses—Absolute numbers and ratios per 1,000 for each diagnosis for each day.*

Diagnosis.	Concussion.	Crushing.	Fractures.	Gases, deleterious.	Gunshot wound, character of not specified.	Traumatic amputation.	Wound, lacerated.	Wound, multiple.	Wound, penetrating.	Wound, perforating.	Wound, character and cause not stated.	Others, traumatic.	Total.
Day not stated:													
Absolute numbers	.....	11	131	54	13	19	29	253	374	33	4	63	984
Ratios	.....	440.00	47.52	44.22	101.56	226.19	70.73	79.01	75.16	52.97	46.51	375.00	71.87
1st day:													
Absolute numbers	7	10	762	124	80	42	104	1,344	2,086	178	69	60	4,866
Ratios	636.36	400.00	276.39	101.56	625.00	500.00	253.66	419.74	419.21	285.72	802.33	357.14	355.41
2d day:													
Absolute numbers	.....	.....	316	97	14	9	32	418	665	84	3	12	1,650
Ratios	.....	.....	114.62	79.44	109.37	107.14	78.05	130.54	133.64	134.83	34.88	71.43	120.52
3d day:													
Absolute numbers	.....	.....	167	77	4	2	20	205	292	37	3	5	812
Ratios	.....	.....	60.57	63.06	31.25	23.81	48.78	64.02	58.68	59.39	34.88	29.76	59.31
4th day:													
Absolute numbers	.....	.....	109	75	3	2	18	112	170	25	1	5	520
Ratios	.....	.....	39.54	61.42	23.44	23.81	43.90	34.98	34.16	40.13	11.63	29.76	37.98
5th day:													
Absolute numbers	.....	1	88	63	1	1	13	83	102	19	.....	2	373
Ratios	.....	40.00	31.92	51.60	7.81	11.90	31.71	25.92	20.50	30.50	.....	11.90	27.24
6th day:													
Absolute numbers	1	1	85	69	.....	.....	15	75	128	20	2	2	398
Ratios	90.91	40.00	30.83	56.51	.....	.....	36.59	23.42	25.72	32.10	23.26	11.90	29.07
7th day:													
Absolute numbers	.....	.....	55	76	1	.....	11	75	101	11	1	1	332
Ratios	.....	.....	19.95	62.24	7.81	.....	26.83	23.42	20.30	17.66	11.63	5.95	24.25
8th day:													
Absolute numbers	1	.....	53	60	4	.....	3	46	82	18	1	2	270
Ratios	90.91	.....	19.22	49.14	31.25	.....	7.32	14.37	16.48	28.89	11.63	11.90	19.72
9th day:													
Absolute numbers	.....	.....	59	47	.....	1	9	36	76	17	.....	2	247
Ratios	.....	.....	21.40	38.49	.....	11.90	21.95	11.24	15.27	27.29	.....	11.90	18.04
10th day:													
Absolute numbers	.....	.....	47	46	.....	.....	10	32	64	18	.....	1	218
Ratios	.....	.....	17.05	37.67	.....	.....	24.39	9.99	12.86	28.89	.....	5.95	15.92
11th day:													
Absolute numbers	.....	.....	48	55	1	.....	6	34	57	7	.....	.....	208
Ratios	.....	.....	17.41	45.04	7.81	.....	14.63	10.62	11.45	11.24	.....	.....	15.19
12th day:													
Absolute numbers	2	.....	53	41	1	.....	10	21	53	15	.....	.....	196
Ratios	181.82	.....	19.22	33.58	7.81	.....	24.39	6.56	10.65	24.08	.....	.....	14.32

TABLE 15.—*Deaths in hospitals, battle injuries, American Expeditionary Forces, 1917 and 1918—Day of treatment on which death occurred—Diagnoses—Absolute numbers and ratios per 1,000 for each diagnosis for each day*—Continued.

Diagnosis.	Concussion.	Crushing.	Fractures.	Gases, deleterious.	Gunshot wound, character of not specified.	Traumatic amputation.	Wound, lacerated.	Wound, multiple.	Wound, penetrating.	Wound, perforating.	Wound, character and cause not stated.	Others, traumatic.	Total.
13th day:													
Absolute numbers			38	30	1	1	11	33	53	9			176
Ratios			13.78	24.57	7.81	11.90	26.83	10.31	10.65	14.45			12.85
14th day:													
Absolute numbers			25	31	2		8	21	33	10	1	2	133
Ratios			9.07	25.39	15.62		19.51	6.56	6.63	16.05	11.63	11.90	9.71
15th day:													
Absolute numbers			17	22	1	2	5	15	46	4			112
Ratios			6.17	18.02	7.81	23.81	12.20	4.68	9.24	6.42			8.18
16th day:													
Absolute numbers			23	13	1		8	22	37	9		1	114
Ratios			8.34	10.65	7.81		19.51	6.87	7.44	14.45		5.95	8.33
17th day:													
Absolute numbers			32	15			7	17	31	5			107
Ratios			11.61	12.28			17.07	5.31	6.23	8.03			7.82
18th day:													
Absolute numbers			25	17		1	3	23	40	3		1	113
Ratios			9.07	13.92		11.90	7.32	7.18	8.04	4.82		5.95	8.25
19th day:													
Absolute numbers			25	11			5	12	32	6			91
Ratios			9.07	9.01			12.20	3.75	6.43	9.63			6.65
20th day:													
Absolute numbers			25	16			2	12	25	3		1	84
Ratios			9.07	13.10			4.88	3.75	5.02	4.82		5.95	6.14
21st day:													
Absolute numbers			25	6		1	4	16	12	5			69
Ratios			9.07	4.91		11.90	9.76	5.00	2.41	8.03			5.04
22d day:													
Absolute numbers			16	7	1		5	16	23	2			70
Ratios			5.80	5.73	7.81		12.20	5.00	4.62	3.21			5.11
23d day:													
Absolute numbers			14	10			6	15	19	3			67
Ratios			5.08	8.19			14.63	4.68	3.82	4.82			4.89
24th day:													
Absolute numbers			20	7			2	9	15			1	54
Ratios			7.25	5.73			4.88	2.81	3.01			5.95	3.94
25th day:													
Absolute numbers			19	2			3	5	19	3			51
Ratios			5.89	1.64			7.32	1.56	3.82	4.82			3.72

26th day:													
Absolute numbers			15	9			2	17	16	4			63
Ratios			5.44	7.37			4.88	5.31	3.22	6.42			4.60
27th day:													
Absolute numbers			17	8			4	14	19	2		1	65
Ratios			6.17	6.55			9.76	4.37	3.82	3.21		5.95	4.75
28th day:													
Absolute numbers			7	8			1	9	13	3			41
Ratios			2.54	6.55			2.44	2.81	2.61	4.82			2.99
29th day:													
Absolute numbers			11	3			1	4	6	3		1	29
Ratios			3.99	2.46			2.44	1.25	1.21	4.82		5.95	2.12
30th day:													
Absolute numbers			4	4			3	5	20	1			37
Ratios			1.45	3.28			7.32	1.56	4.02	1.61			2.70
31st to 35th day:													
Absolute numbers			46	27		1	7	39	49	14			183
Ratios			16.88	22.11		11.90	17.07	12.18	9.85	22.47			13.37
36th to 40th day:													
Absolute numbers			44	11			4	25	40	11			135
Ratios			15.96	9.01			9.76	7.81	8.04	17.66			9.86
41st to 45th day:													
Absolute numbers			30	11			2	20	32	2			97
Ratios			10.88	9.01			4.88	6.25	6.43	3.21			7.08
46th to 50th day:													
Absolute numbers		1	32	10			3	15	27	5		1	94
Ratios		40.00	11.61	8.19			7.32	4.68	5.43	8.03		5.95	6.87
51st to 55th day:													
Absolute numbers			21	7			3	12	15	8			66
Ratios			7.62	5.73			7.32	3.75	3.01	12.84			4.82
56th to 60th day:													
Absolute numbers			17	8			3	14	12	3			57
Ratios			6.17	6.55			7.32	4.37	2.41	4.82			4.16
61st to 65th day:													
Absolute numbers		1	21	2			3	8	9	4		1	49
Ratios		40.00	7.62	1.64			7.32	2.50	1.81	6.42		5.95	3.58
66th to 70th day:													
Absolute numbers			20	4			5	11	11	3		1	55
Ratios			7.25	3.28			12.20	3.44	2.21	4.82		5.95	4.02
71st to 75th day:													
Absolute numbers			23	5			3	10	6	2			49
Ratios			8.34	4.09			7.32	3.12	1.21	3.21			3.58
76th to 80th day:													
Absolute numbers			23	4		1	2	3	5	1	1		40
Ratios			8.34	3.28		11.90	4.88	.94	1.00	1.61	11.63		2.92
81st to 85th day:													
Absolute numbers			15	1			2	3	8	1			30
Ratios			5.44	.82			4.88	.94	1.61	1.61			2.19
86th to 90th day:													
Absolute numbers			10	3			2	2	4	1			22
Ratios			3.63	2.46			4.88	.62	.80	1.61			1.61

TABLE 15.—*Deaths in hospitals, battle injuries, American Expeditionary Forces, 1917 and 1918—Day of treatment on which death occurred—Diagnoses—Absolute numbers and ratios per 1,000 for each diagnosis for each day*—Continued.

Diagnosis.	Concussion.	Crushing.	Fractures.	Gases, deleterious.	Gunshot wound, character of not specified.	Traumatic amputation.	Wound, lacerated.	Wound, multiple.	Wound, penetrating.	Wound, perforating.	Wound, character and cause not stated.	Others, traumatic	Total.
91st to 95th day:													
Absolute numbers	.....	.....	13	2	.....	1	2	6	7	.....	.....	.....	31
Ratios	.....	.....	4.72	1.64	.....	11.90	4.88	1.87	1.41	.....	.....	.....	2.26
96th to 100th day:													
Absolute numbers	.....	.....	10	2	.....	.....	.....	2	4	4	.....	1	23
Ratios	.....	.....	3.63	1.64	.....	.....	.....	.62	.80	6.42	.....	5.95	1.68
101st day and over:													
Absolute numbers	.....	.....	101	21	.....	.....	9	33	38	7	.....	1	210
Ratios	.....	.....	36.63	17.20	.....	.....	21.95	10.31	7.64	11.24	.....	5.95	15.34
Total:													
Absolute numbers	11	25	2,757	1,221	128	84	410	3,202	4,976	623	86	168	13,691
Ratios	1,000.00	1,000.00	1,000.02	999.97	999.97	999.96	1,000.06	999.99	999.98	1,000.09	1,000.01	999.94	999.97

Military Agents.

The military agents used by the enemy and their effectiveness in inflicting wounds in battle are matters which are of the greatest interest and importance to military medical students. Tables 16, 17, 18, and 19 have been prepared to show the number of cases, deaths, discharges, and days lost, with the proportional numbers of officers, for enlisted men, and for the totals, by the various military agents.

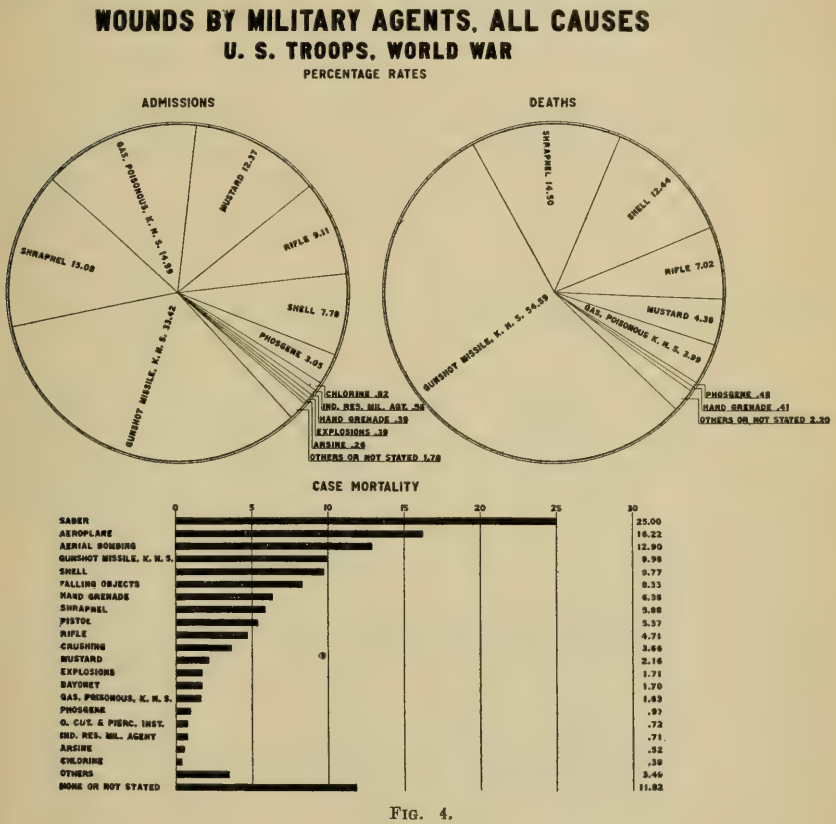


Fig. 4.

All Agents.

Admissions.—Of the 224,089 admissions to hospital for battle injuries, 147,651, or 65.90 per cent, occurred as the result of gunshot injuries of various kinds; 70,552, or 31.49 per cent, of gassing; and 5,886, or 2.63 per cent, of the various other military agents.

Deaths.—Of the deaths resulting from these injuries, 12,192, or 89.05 per cent, were from gunshot wounds; 1,221, or 8.92 per cent, from gassing; and 278, of 2.03 per cent, from other military agents. The number of men dying of each 100 wounded by gunshot missiles was 8.26, by gas 1.73, and by all other military agents 4.72.

Discharges.—Of the men discharged for disability, 17,176 were the result of gunshot wounds, 2,853 of gassing, and 559 of other military agents. The discharges as a result of gunshot wounds were 11.63 per cent of the total number; of gassing, 4.04 per cent; and of other military agents, 9.50 per cent.

Time lost.—Of the total time lost, wounds by gunshot missiles, kind not specified, caused a loss of 5,847,670 days, or a little more than one-third of the total, a noneffective rate of 15.31 per 1,000; wounds by shrapnel, 3,355,329 days, or a little less than one-fifth of the total, a noneffective rate of 8.78; by rifle ball, 2,247,645 days; and by shells, 1,973,856 days.

TABLE 16.—*Admissions, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Causative agents—Absolute numbers and ratios per 1,000.*

	Officers.		Enlisted men.								Total officers and enlisted men.	
			White.		Colored.		Color not stated.		Total.			
Mean strength (annual, 1918)	46,854		936,589		63,090		No strength.		999,680		1,046,534	
Causative agents.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
None or not stated	63	1.34	767	0.82	17	0.27	346	.....	1,130	1.13	1,193	1.14
Aerial bombing	4	.09	94	.10	18	.29	8	.....	120	.12	124	.12
Aeroplane	35	.75	30	.03	.....	.....	9	.....	39	.04	74	.07
Explosion	50	1.07	674	.72	15	.24	140	.....	829	.83	879	.84
Crushing	3	.06	70	.07	5	.08	4	.....	79	.08	82	.08
Cutting and piercing instruments (others)	3	.06	119	.13	4	.06	13	.....	136	.14	139	.13
Bayonet	3	.06	180	.19	2	.03	50	.....	232	.23	235	.22
Saber	.....	.....	11	.01	.....	.....	1	.....	12	.01	12	.01
Gas, poisonous, kind not stated	1,249	26.66	24,290	25.94	526	8.34	7,522	.....	32,338	32.35	33,587	32.08
Chlorine	31	.66	1,607	1.72	36	.57	169	.....	1,812	1.81	1,843	1.76
Mustard gas	883	18.84	22,988	24.55	515	8.16	3,325	.....	26,828	26.83	27,711	26.48
Phosgene	409	8.73	5,540	5.92	65	1.03	820	.....	6,425	6.43	6,834	6.53
Arsine	31	.66	345	.37	117	1.85	84	.....	546	.55	577	.55
Gunshot missile, kind not specified	2,758	58.86	56,540	60.37	956	15.15	14,629	.....	72,125	72.15	74,883	71.56
Pistol ball	12	.26	196	.21	12	.19	22	.....	230	.23	242	.23
Rifle ball	816	17.42	16,352	17.46	289	4.58	2,963	.....	19,604	19.61	20,420	19.51
Shell	857	18.29	12,157	12.98	141	2.23	4,284	.....	16,582	16.59	17,439	16.66
Shrapnel	826	17.63	27,333	29.18	490	7.77	5,138	.....	32,961	32.97	33,787	32.28
Hand grenade	31	.66	672	.72	33	.52	144	.....	849	.85	880	.84
Falling objects	8	.17	115	.12	18	.29	27	.....	160	.16	168	.16
Indirect result of military agent	60	1.28	994	1.06	18	.29	187	.....	1,199	1.20	1,259	1.20
Others, traumatic	66	1.41	1,388	1.50	41	.65	226	.....	1,655	1.67	1,721	1.66
Total	8,198	174.97	172,462	184.14	3,318	52.59	40,111	.....	215,891	215.96	224,089	214.12

TABLE 17.—*Deaths in hospitals, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Causative agents—Absolute numbers and ratios per 1,000.*

	Officers.		Enlisted men.								Total officers and enlisted men.	
			White.		Colored.		Color not stated.		Total.			
Mean strength (annual, 1918)	46,854		936,589		63,090		No strength.		999,680		1,046,534	
Causative agents.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
None or not stated	10	0.21	49	0.05	.....	.....	82	.....	131	0.13	141	0.13
Aerial bombing	1	.02	8	.01	.....	.....	7	.....	15	.02	16	.02
Aeroplane	9	.19	2	.00	.....	.....	1	.....	3	.00	12	.01
Explosion	1	.02	9	.01	1	0.02	4	.....	14	.01	15	.01
Crushing	.....	.....	2	.00	.....	.....	1	.....	3	.00	3	.00
Cutting and piercing instruments (others)	.....	.....	1	.00	.....	.....	.....	.....	1	.00	1	.00
Bayonet	.....	.....	2	.00	.....	.....	2	.....	4	.00	4	.00
Saber	.....	.....	2	.00	.....	.....	1	.....	3	.00	3	.00
Gas, poisonous, kind not stated	21	.45	306	33	3	.05	216	.....	525	.53	546	.52
Chlorine	.....	.....	6	.01	.....	.....	1	.....	7	.01	7	.01
Mustard gas	5	.11	493	.53	8	.13	93	.....	594	.59	599	.57
Phosgene	2	.04	46	.05	1	.02	17	.....	64	.06	66	.06
Arsine	.....	.....	2	.00	1	.02	.....	.....	3	.00	3	.00
Gunshot missile, kind not specified	362	7.73	4,033	4.31	44	.70	3,035	.....	7,112	7.11	7,474	7.14
Pistol ball	.....	.....	7	.01	3	.05	3	.....	13	.01	13	.01
Rifle ball	51	1.09	592	.63	6	.10	312	.....	910	.91	961	.92
Shell	84	1.79	775	.83	7	.11	837	.....	1,619	1.62	1,703	1.63
Shrapnel	62	1.32	1,168	1.25	15	.24	740	.....	1,923	1.92	1,985	1.90
Hand grenade	2	.04	36	.04	2	.03	16	.....	54	.05	56	.05
Falling objects	1	.02	3	.00	1	.02	9	.....	13	.01	14	.01
Indirect result of military agent	1	.02	6	.01	.....	.....	2	.....	8	.01	9	.01
Others	5	.11	31	.03	1	.02	23	.....	55	.06	60	.06
Total	617	13.17	7,579	8.09	93	1.47	5,402	.....	13,074	13.08	13,691	13.08

TABLE 18.—*Discharges, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Causative agents—Absolute numbers and ratios per 1,000.*

	Officers.		Enlisted men.								Total officers and enlisted men.	
			White.		Colored.		Color not stated.		Total.			
Mean strength (annual, 1918)	46,854		936,589		63,090		No strength.		999,680		1,046,534	
Causative agents.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
None	15	0.32	105	0.11	2	0.03	9	.....	116	0.12	131	0.13
Aerial bombing	1	.02	27	.03	.....	.....	1	.....	28	.03	29	.03
Aeroplane	1	.02	5	.01	.....	.....	.....	.....	5	.01	6	.01
Explosion	1	.02	155	.17	4	.06	3	.....	162	.16	163	.16
Crushing	.....	.....	9	.01	.....	.....	.....	.....	9	.01	9	.01
Cutting and piercing instruments (other)	.....	.....	5	.01	.....	.....	.....	.....	5	.01	5	.00
Bayonet	.....	.....	8	.01	.....	.....	.....	.....	8	.01	8	.01
Saber	.....	.....	2	.00	.....	.....	.....	.....	2	.00	2	.00
Gas, poisonous, kind not stated	113	2.41	2,181	2.33	21	.33	72	.....	2,274	2.27	2,387	2.28
Chlorine	.....	.....	46	.05	1	.02	1	.....	48	.05	48	.05
Mustard gas	19	.41	313	.33	2	.03	4	.....	319	.32	338	.32
Phosgene	7	.15	72	.08	.....	.....	.....	.....	72	.07	79	.08
Arsine	.....	.....	1	.00	.....	.....	.....	.....	1	.00	1	.00

TABLE 18.—*Discharges, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Causative agents—Absolute numbers and ratios per 1,000*—Contd.

	Officers.		Enlisted men.								Total officers and enlisted men.	
			White.		Colored.		Color not stated.		Total.			
Mean strength (annual, 1918).	46,854		936,589		63,090		No strength.		999,680		1,046,534	
Causative agents.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
Gunshot missile, kind not specified	81	1.73	4,412	4.71	63	1.00	251	.....	4,726	4.73	4,807	4.59
Pistol ball	.....	.....	26	.03	.....	.....	.....	.....	26	.03	26	.02
Rifle ball	41	.88	3,238	3.46	40	.63	152	.....	3,430	3.43	3,471	3.32
Shell	53	1.13	3,335	3.56	42	.67	306	.....	3,683	3.68	3,736	3.57
Shrapnel	51	1.09	4,684	5.00	61	.97	165	.....	4,910	4.91	4,961	4.74
Hand grenade	.....	.....	154	.16	3	.05	18	.....	175	.18	175	.17
Falling objects	.....	.....	2	.00	.....	.....	.....	.....	2	.00	2	.00
Indirect result of military agent	.....	.....	108	.12	2	.03	9	.....	119	.12	119	.11
Others	1	.02	78	.08	4	.06	2	.....	84	.08	85	.08
Total	384	8.20	18,966	20.25	245	3.88	993	.....	20,204	20.21	20,588	19.67

TABLE 19.—*Days lost in hospital, battle injuries, American Expeditionary Forces—Revised tables for 1917 and 1918—Causative agents—Absolute numbers and noneffective ratios per 1,000.*

	Officers.		Enlisted men.								Total officers and enlisted men.	
			White.		Colored.		Color not stated.		Total.			
Mean strength (annual, 1918)	46,854		936,589		63,090		No strength.		999,680.		1,046,534	
Causative agent.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.	Days.	Noneffective rate.
None or not stated	2,633	0.15	46,670	0.14	877	0.04	10,959	....	58,506	0.16	61,139	0.16
Aerial bombing	1,079	.06	11,092	.03	529	.02	1,147	....	12,768	.03	13,847	.04
Aeroplane	3,263	.19	4,071	.01	.....	....	385	....	4,456	01	7,719	.02
Explosions	3,707	.22	32,968	.10	1,019	.04	6,019	....	40,006	.11	43,713	.11
Crushing	36	.00	5,914	.02	533	.02	398	....	6,845	.02	6,881	.02
Cutting and piercing instruments (other)	285	.02	5,626	.02	126	.01	130	....	5,882	.02	6,167	.02
Bayonet	369	.02	8,137	.02	182	.01	1,296	....	9,615	.03	9,984	.03
Saber	.....	.....	1,451	.00	122	.01	4	....	1,577	.00	1,577	.00
Gas, poisonous, kind not stated	49,781	2.91	985,703	2.88	23,240	1.01	194,250	....	1,203,193	3.30	1,252,974	3.28
Chlorine	2,047	.12	86,980	.25	1,723	.07	9,723	....	98,426	.27	100,473	.26
Mustard gas	42,408	2.48	1,060,276	3.10	23,029	1.00	146,280	....	1,229,585	3.37	1,271,993	3.33
Phosgene	21,913	1.28	253,429	.74	3,968	.17	31,730	....	289,127	.79	311,040	.81
Arsine	619	.04	5,332	.02	3,012	.13	1,756	....	10,100	.03	10,719	.03
Gunshot missile, kind not specified	174,353	10.20	5,081,027	14.86	67,475	2.93	524,815	....	5,673,317	15.56	5,847,670	15.31
Pistol ball	1,915	.11	18,853	.06	1,035	.04	1,330	....	21,218	.06	23,133	.06
Rifle ball	94,468	5.52	1,950,080	5.70	29,333	1.27	173,764	....	2,153,177	5.90	2,247,645	5.88
Shell	111,516	6.52	1,681,584	4.92	19,855	.86	160,901	....	1,862,340	5.10	1,973,856	5.17
Shrapnel	79,923	4.67	2,942,891	8.61	45,000	1.95	287,515	....	3,275,406	8.98	3,355,329	8.78
Hand grenade	4,086	.24	64,870	.19	2,509	.11	7,270	....	74,649	.21	78,735	.21
Falling objects	133	.01	5,268	.02	915	.04	1,017	....	7,200	.02	7,333	.02
Indirect result of military agent	6,600	.39	64,859	.19	983	.04	7,560	....	73,402	.20	80,002	.21
Others	3,979	.23	107,698	.32	3,652	.16	10,685	....	122,035	.33	126,014	.33
Total	605,113	35.38	14,424,779	42.20	229,117	9.95	1,578,934	....	16,232,830	44.49	16,837,943	44.08

TABLE 20.—*Cases in hospital Dec. 31, 1919, battle injuries, American Expeditionary Forces, 1917 and 1918.*

Causative agent.	Absolute numbers.	Per cent each diagnosis of total remaining.	Per cent of wounded (other than deaths).
None or not stated	20	0.35	1.90
Aerial bombing	7	.12	6.48
Aeroplane	2	.04	3.23
Explosion	8	.14	.93
Crushing	1	.02	1.27
Cutting and piercing instruments (other)	.....	.....	.00
Bayonet	.....	.....	.00
Saber	.....	.....	.00
Gas, poisonous, kind not stated	.....	.....	.00
Chlorine	.....	.....	.00
Mustard gas	.....	.....	.00
Phosgene	.....	.....	.00
Arsine	4	.07	.70
Gunshot missile, kind not specified	2,839	49.22	4.21
Pistol ball	9	.16	3.93
Rifle ball	958	16.61	4.92
Shell	959	16.63	6.09
Shrapnel	890	15.43	2.80
Hand grenade	32	.56	3.88
Falling objects	3	.05	1.95
Indirect result of military agent	22	.38	1.76
Other	14	.24	.84
Total	5,768	100.00	2.74

GASES.

Of the total gas cases, 47.61 per cent were of the kind not specified, 2.61 per cent of chlorine, 39.28 per cent of mustard, 9.69 per cent of phosgene, and 0.82 per cent of arsine.

The case mortality from the various forms of gas used is shown in the following table:

TABLE 21.—*Wounds by gas, World War.*

	Number of cases.	Deaths.	Case mortality.
			Per cent.
Gas, kind not stated	33,587	546	1.63
Chlorine	1,843	7	.38
Mustard	27,711	599	2.16
Phosgene	6,834	66	.97
Arsine	577	3	.52

It is apparent that the mortality in hospital was by far the greatest from mustard gas. There is, unfortunately, no data available to show the relative mortality among those who died on the field of action.

Thirty-three thousand two hundred and fifty-three gas cases, or 47.13 per cent of the total not resulting in death, were treated in hospital 29 days or less. The average time lost by this number of cases was 13.45 days. There were four cases of gassing being treated in hospital at the end of the year 1919.

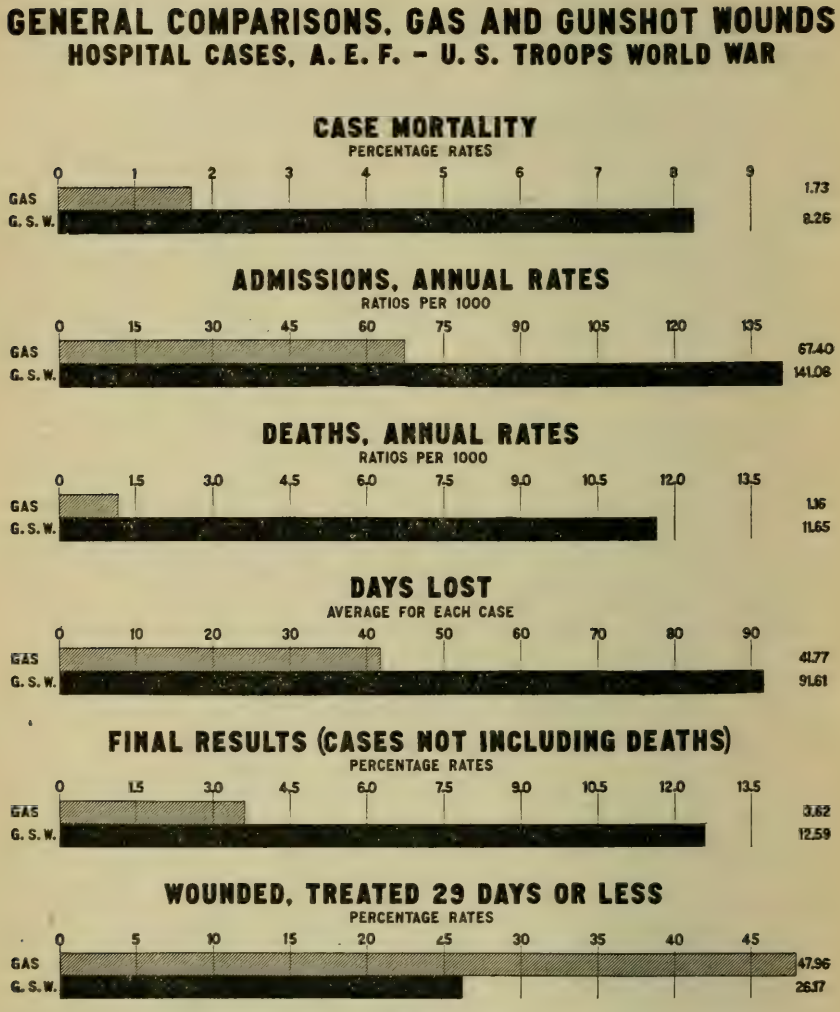


FIG. 5.

[Final results indicate definite disabilities upon discharge from the military service.]

GUNSHOT MISSILES.

Of the gunshot missiles, 50.71 per cent were of the kind not specified, 0.16 per cent of pistol ball, 13.83 per cent of rifle ball, 11.81 per cent of shell, 22.88 per cent of shrapnel, and 0.60 per cent of hand grenades.

The case mortality for the various forms of gunshot missile is shown in the following table:

TABLE 22.—*Wounds by gunshot missiles, World War.*

	Cases.	Deaths.	Case mortality.
			Per cent.
Gunshot missile, kind not specified	74,883	7,474	9.98
Pistol	212	13	5.37
Rifle	20,420	961	4.71
Shell	17,439	1,703	9.77
Shrapnel	33,787	1,985	5.88
Hand grenade	880	56	6.36

It is apparent that the shell wounds were by far the most deadly of the specified missiles. Judging from the approximate mortality of the shell wounds and of the gunshot missiles kind not specified, it would appear that a large per cent of the latter were probably shell.

COMPARISON OF MILITARY AGENTS, CIVIL WAR AND WORLD WAR.

Gunshot missiles.—It is of interest here to compare the relative effectiveness of gunshot missiles as shown by the wounded among the Northern troops in the Civil War and the American troops in the World War.

TABLE 23.—*Wounds by gunshot missiles, Civil War and World War.*

	Cases.		Proportionate numbers per 1,000.	
	Civil War.	World War.	Civil War.	World War.
Shell and cannon ball	12,879	17,439	52.39	118.11
Grape, canister, and shrapnel	1,153	33,787	4.69	228.83
Small arm and hand grenade	127,929	21,542	520.48	145.89
Missile not specified	103,829	74,883	422.43	507.16
Total	245,790	147,651	.....	.....
[Omitting the cases for the missile not specified, the table would then be as follows:]				
Shell and cannon ball	12,879	17,439	90.72	239.66
Grape, canister, and shrapnel	1,153	33,787	8.12	464.32
Small arm and hand grenade	127,929	21,542	901.16	296.04
Total	141,961	72,768	.....	.....

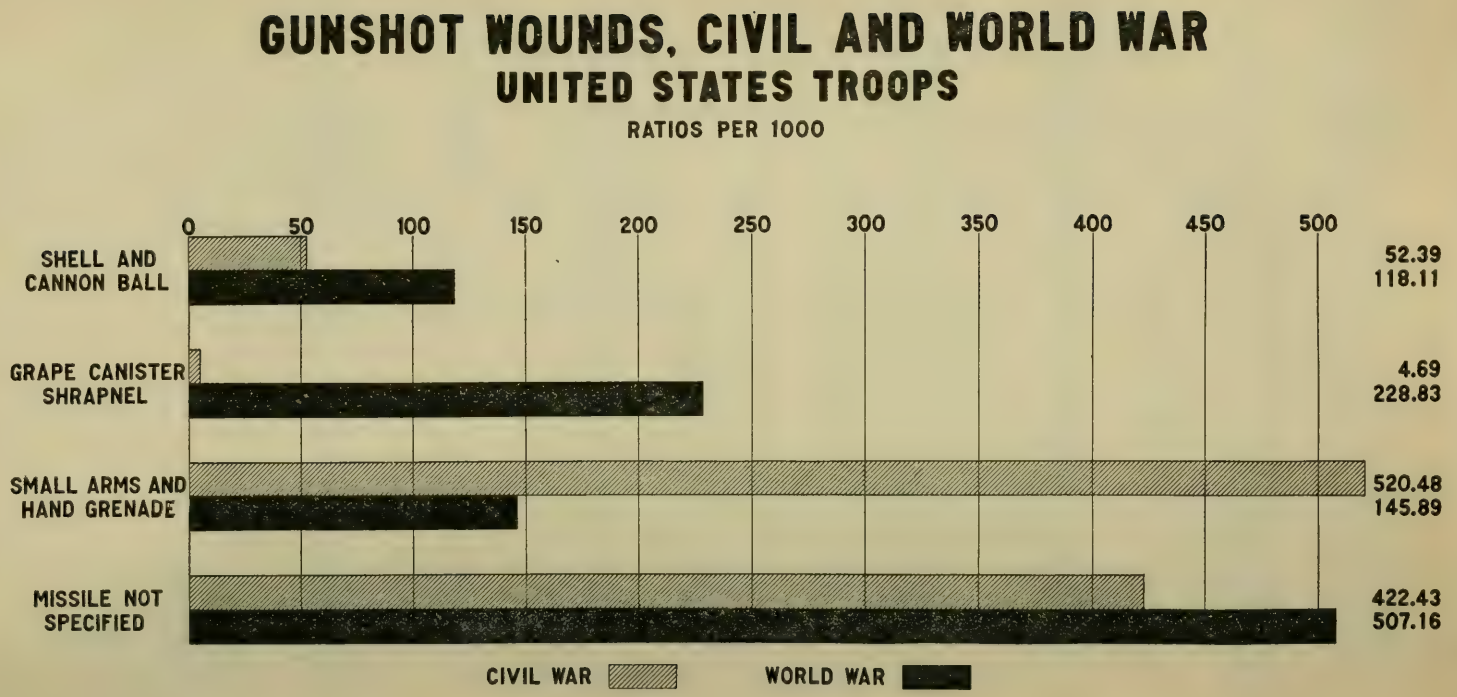

GUNSHOT WOUNDS, CIVIL AND WORLD WAR
UNITED STATES TROOPS
RATIOS PER 1000
0
50
100
150
200
250
300
350
400
450
500
SHELL AND CANNON BALL
52.39
118.11
GRAPE CANISTER SHRAPNEL
4.69
228.83
SMALL ARMS AND HAND GRENADE
520.48
145.89
MISSILE NOT SPECIFIED
422.43
507.16
CIVIL WAR
WORLD WAR

FIG. 6.

It is clearly apparent that the gunshot missiles of the greatest military importance during the World War were those of the artillery, and that during the Civil War, of the small arms.

Cutting and piercing instruments.—It is also of interest to compare the relative frequency of gunshot wounds and cutting and piercing instruments in the Civil War and the World War.

Of the wounds produced by cutting and piercing instruments and gunshot missiles in the World War, 0.26 per cent were produced by the former and 99.74 per cent by the latter. In the Civil War the per cent of wounds by cutting and piercing instruments was 0.37 and by gunshot missiles 99.63. In the various foreign wars which occurred between the years 1857 and 1871, 2.4 per cent occurred as a result of cutting and piercing instruments and 97.6 per cent of gunshot missiles. It is apparent that as used against the American troops in the late war, and as against the Northern troops in the Civil War, as judged by admission to hospital, the bayonet and saber were military weapons of little importance.

TABLE 24.—*Wounds by gunshot and cutting and piercing instruments, Civil War and World War, United States troops.*

	Cases.		Deaths.		Case mortality.		Percentage of total.	
	Gunshot.	Cutting and piercing wounds.	Gunshot.	Cutting and piercing wounds.	Gunshot.	Cutting and piercing wounds.	Gunshot.	Cutting and piercing wounds.
Foreign wars, 1857 to 1871..	138,935	3,485	.....	.....	.....	.....	97.60	2.40
Civil War.....	245,790	922	31,922	56	13.60	6.07	99.63	0.37
World War.....	147,651	386	12,192	8	8.26	2.07	99.74	0.26

WOUNDS, ALL CAUSES.

MULTIPLE WOUNDS.

Consideration.—As stated, a very large percentage of the wounds received by American soldiers in the World War were by artillery missles. In addition to the artillery wounds there were no doubt many wounded by machine-gun fire. As a consequence of these two factors a large number of the wounded men received multiple wounds or wounds involving more than one region of the body. In considering the location of wounds, the human body has been divided into the 10 principal regions. Table 25 has been prepared to show for these 10 regions the wounds received both where only one region was involved, and also where the two regions were involved as the result of multiple wounds.

Number of multiple wounds.—There were 42,023 cases listed as having received wounds involving two regions; consequently the total number of wounds received by regions is shown in the table as 266,112, or 42,023 in excess of the actual number of wounded men. It is not to be inferred that no soldiers were ever wounded in more than two anatomical regions. However, it rarely happed that any man received wounds of importance in more. Table 26 has, in a similar way, been prepared to show the deaths by regions for single and multiple wounds. There were 4,027 cases listed which resulted

in death as having received wounds involving two regions; consequently the total shown by regions in table is 17,748, or 4,027 in excess of the actual number of men who died.

CASE MORTALITY.

Single and multiple wounds.—Table 27 shows the case mortality for single and multiple wounds. It will be noted that the case mortality for single wounds was 5.29, for all wounds, including the multiple, 6.67; or, as was to be expected, the multiple wounds being more severe and more extensive, as well as being more frequently received as a result of artillery fire, were attended with a higher mortality.

TABLE 25.—*Admissions, battle injuries, American Expeditionary Forces, 1917 and 1918, showing regions involved for single and multiple wounds.*

Principal regions.	Secondary regions.											
	No associated region.	Abdomen or pelvis.	Back.	Face.	Genital organs.	Head.	Lower extremity.	Neck.	Spine.	Thorax.	Upper extremity.	Total.
Region not stated	8,839											8,839
Abdomen or pelvis	3,189		219	137	85	100	1,137	34	78	1,311	579	6,869
Back	4,633	219		108	23	190	1,083	123	20	654	1,018	8,069
Face	7,883	137	108		640	517	1,070	1,087	8	11,298	1,403	24,251
Genital organs	563	85	23	640		18	747	45	2	1,207	87	3,417
Head	7,920	100	190	617	18		1,029	187	18	279	1,210	11,569
Lower extremity	57,536	1,137	1,083	1,070	747	1,029		292	76	1,816	7,741	72,527
Neck	2,179	34	123	1,087	45	197	292		16	1,424	509	5,896
Spine	550	78	20	8	2	18	76	16		62	49	879
Thorax	47,344	1,311	654	11,298	1,267	279	1,816	1,424	62		2,189	67,584
Upper extremity	41,430	579	1,016	1,403	87	1,210	7,741	509	49	2,189		56,213
Total	182,066	3,680	3,436	16,368	2,854	3,648	14,991	3,717	329	20,240	14,783	[1] 266,112

[1] Including 42,023 admissions due to 42,023 wounds involving two regions; actual number of admissions, 224,089.

TABLE 26.—*Deaths in hospitals, battle injuries, American Expeditionary Forces, 1917 and 1918, showing regions involved for single and multiple wounds.*

Principal regions.	Secondary regions.											
	No associated region.	Abdomen or pelvis.	Back.	Face.	Genital organs.	Head.	Lower extremity.	Neck.	Spine.	Thorax.	Upper extremity.	Total.
Region not stated	1,198											1,198
Abdomen or pelvis	1,312		71	19	8	46	482	11	46	302	195	2,492
Back	280	71		9		18	125	14	13	109	77	716
Face	137	19	9		7	70	63	28	1	333	51	718
Genital organs	14	8		7		2	44	1	1	21	3	101
Head	1,086	46	18	70	2		150	18	9	71	135	1,605
Lower extremity	3,013	482	125	63	44	150		20	27	237	698	4,859
Neck	93	11	14	28	1	19	20		8	70	38	301
Spine	200	46	13	1	1	9	27	8		53	20	378
Thorax	1,624	302	109	332	21	71	237	70	53		333	3,153
Upper extremity	677	195	77	51	3	135	698	38	20	333		2,227
Total	9,634	1,180	436	581	87	519	1,846	208	178	1,529	1,550	[1] 17,748

[1] Including 4,027 deaths due to 4,027 deaths involving two regions; actual number of deaths, 13,691.

TABLE 27.—*Case mortality (per cent) in hospitals, battle injuries, American Expeditonary Forces, 1917 and 1918, showing regions involved for single and multiple wounds.*

Principal regions.	Secondary regions.											
	No associated region.	Abdomen or pelvis.	Back.	Face.	Genital organs.	Head.	Lower extremity.	Neck.	Spine.	Thorax.	Upper extremity.	Total.
Region not stated	13.55	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.55
Abdomen or pelvis	41.14	.....	32.42	13.87	9.41	46.00	42.39	32.35	58.97	23.03	33.68	36.28
Back	6.04	32.42	.....	8.33	.....	9.47	11.54	11.38	65.00	16.67	7.58	8.87
Face	1.74	13.87	8.33	.....	1.09	11.35	5.89	2.58	12.50	2.95	3.64	2.96
Genital organs	2.49	9.41	.....	1.09	.....	11.11	5.89	2.22	50.00	1.74	3.45	2.96
Head	13.71	46.00	9.47	11.35	11.11	.....	14.58	9.63	50.00	25.45	11.16	13.88
Lower extremity	5.24	42.39	11.54	5.89	5.89	14.58	.....	6.85	35.53	13.05	9.02	6.70
Neck	4.27	32.35	11.38	2.58	2.22	9.63	6.85	.....	50.00	4.92	7.47	5.11
Spine	36.36	58.97	65.00	12.50	50.00	50.00	35.53	50.00	.....	85.48	40.82	43.00
Thorax	3.43	23.04	16.67	2.95	1.74	25.45	13.05	4.92	85.48	.....	15.21	4.67
Upper extremity	1.62	33.68	7.58	3.63	3.45	11.16	9.02	7.47	40.82	15.21	.....	3.96
Total	5.29	32.07	12.69	3.55	3.05	14.23	12.31	5.60	54.11	7.55	10.48	6.67

Mortality, by regions.—Table 28 shows the relative standing of single and multiple wounds for admission, deaths, and case mortality. It will be observed that the wounds of the lower extremity and the thorax caused the highest number of admissions and deaths. It was, however, the multiple wounds that caused the highest case mortality. Wounds of the spine and thorax stand at the head of the list, with a case mortality of 85.48 per cent. The wounds of the face and genital organs, however, stand at the bottom of the list, with a case mortality of only 1.09 per cent.

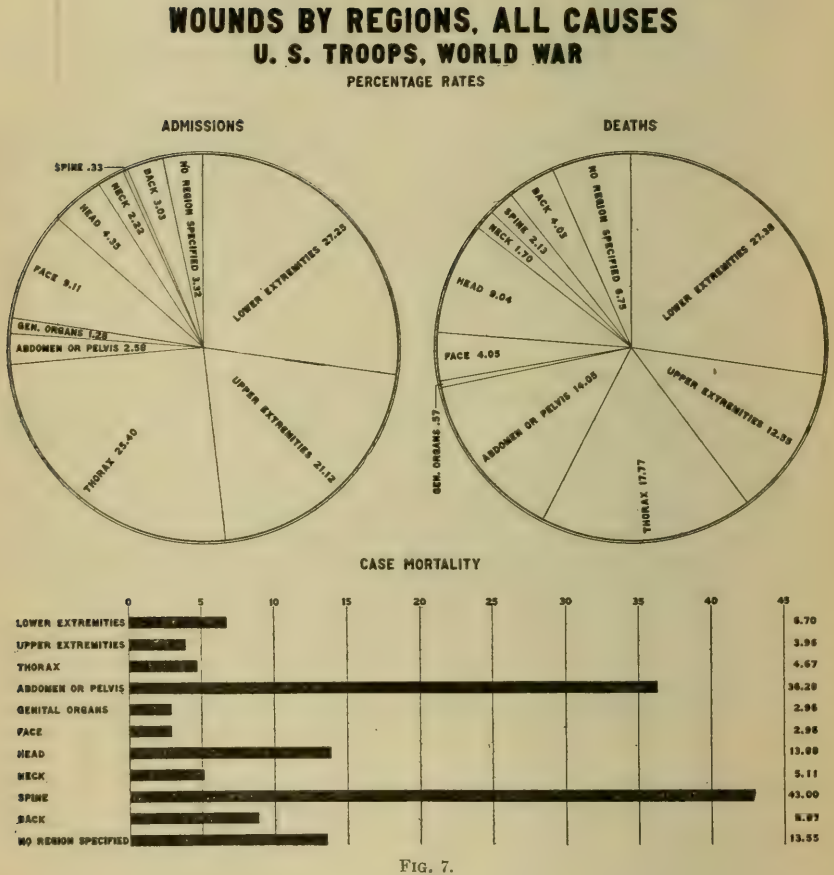

WOUNDS BY REGIONS, ALL CAUSES
U. S. TROOPS, WORLD WAR
PERCENTAGE RATES
ADMISSIONS
SPINE .33
BACK 3.03
NO REGION SPECIFIED 3.32
NECK 2.32
HEAD 4.35
FACE 9.11
GEN. ORGANS 1.28
ABDOMEN OR PELVIS 2.56
THORAX 25.40
UPPER EXTREMITIES 21.12
LOWER EXTREMITIES 27.29
DEATHS
NO REGION SPECIFIED 6.75
BACK 4.05
SPINE 2.13
NECK 1.70
HEAD 9.04
FACE 4.05
GEN. ORGANS .57
ABDOMEN OR PELVIS 14.06
THORAX 17.77
UPPER EXTREMITIES 12.59
LOWER EXTREMITIES 27.38
CASE MORTALITY
0
5
10
15
20
25
30
35
40
45
LOWER EXTREMITIES 6.70
UPPER EXTREMITIES 3.95
THORAX 4.67
ABDOMEN OR PELVIS 36.28
GENITAL ORGANS 2.96
FACE 2.96
HEAD 13.88
NECK 5.11
SPINE 43.00
BACK 8.87
NO REGION SPECIFIED 13.55

FIG. 7.

TABLE 28.—*Battle injuries, American Expeditionary Forces—Single and multiple wounds, one or two regions.*

Section A.—Admissions—Absolute numbers and per cent for each of total.			Section B.—Deaths in hospitals—Absolute numbers and per cent for each of total.			Section C.—Case mortality in hospitals—Per cent of deaths to total cases.	
	Number.	Per cent.		Number.	Per cent.		Per cent.
Lower extremity	57,536	26.73	Lower extremity	3,013	24.12	Spine and thorax	85.48
Thorax	47,344	21.98	Thorax	1,624	12.99	Back and spine	65.00
Upper extremity	41,430	19.24	Abdomen or pelvis	1,312	10.50	Abdomen or pelvis and spine	58.97
Face and thorax	11,298	5.25	Head	1,086	8.69	Genital organs and spine	50.00
Head	7,920	3.68	Lower extremity and upper extremity	698	5.59	Head and spine	50.00
Face	7,883	3.66	Upper extremity	677	5.42	Neck and spine	50.00
Upper extremity and lower extremity	7,741	3.60	Abdomen or pelvis and lower extremity	482	3.86	Abdomen or pelvis and head	46.00
Back	4,633	2.15	Face and thorax	333	2.67	Abdomen or pelvis and lower extremity	42.39
Abdomen or pelvis	3,189	1.48	Thorax and upper extremity	333	2.67	Abdomen or pelvis	41.14
Upper extremity and thorax	2,189	1.02	Abdomen or pelvis and thorax	302	2.42	Spine and upper extremity	40.82
Neck	2,179	1.01	Back	280	2.24	Spine	36.36
Lower extremity and thorax	1,816	.84	Lower extremity and thorax	237	1.90	Lower extremity and spine	35.53
Neck and thorax	1,424	.66	Spine	200	1.60	Abdomen or pelvis and upper extremity	33.68
Upper extremity and face	1,403	.65	Abdomen or pelvis and upper extremity	195	1.56	Abdomen or pelvis and back	32.42
Abdomen or pelvis and thorax	1,311	.61	Head and lower extremity	150	1.20	Abdomen or pelvis and neck	32.35
Head and upper extremity	1,210	.56	Face	137	1.10	Head and thorax	25.45
Thorax and genital organs	1,207	.56	Head and upper extremity	135	1.08	Abdomen or pelvis and thorax	23.03
Abdomen or pelvis and lower extremity	1,137	.53	Back and lower extremity	125	1.00	Back and thorax	16.67
Face and neck	1,087	.51	Back and thorax	109	.87	Thorax and upper extremity	15.21
Back and lower extremity	1,083	.50	Neck	93	.74	Head and lower extremity	14.58
Face and lower extremity	1,070	.50	Back and upper extremity	77	.62	Abdomen or pelvis and face	13.87
Head and lower extremity	1,029	.48	Abdomen or pelvis and back	71	.57	Head	13.71
Back and upper extremity	1,016	.47	Head and thorax	71	.57	Lower extremity and thorax	13.05
Genital organs and lower extremity	747	.35	Neck and thorax	70	.56	Face and spine	12.50
Back and thorax	651	.30	Face and head	70	.56	Back and lower extremity	11.54
Face and genital organs	640	.30	Face and lower extremity	63	.50	Back and neck	11.38
Head and face	617	.29	Spine and thorax	53	.42	Face and head	11.35
Abdomen or pelvis and upper extremity	579	.27	Face and upper extremity	51	.41	Head and upper extremity	11.16
Genital organs	563	.26	Abdomen or pelvis and head	46	.37	Genital organs and head	11.11
Spine	550	.26	Abdomen or pelvis and spine	46	.37	Head and neck	9.63
Neck and upper extremity	509	.24	Genital organs and lower extremity	44	.35	Back and head	9.47
Lower extremity and neck	292	.13	Neck and upper extremity	38	.30	Abdomen or pelvis and genital organs	9.11
Head and thorax	279	.13	Face and neck	28	.22	Lower extremity and upper extremity	9.02
Abdomen or pelvis and back	219	.10	Lower extremity and spine	27	.22	Back and face	8.33
Back and head	190	.09	Genital organs and thorax	21	.17	Back and upper extremity	7.58
Head and neck	187	.09	Spine and upper extremity	20	.16	Neck and upper extremity	7.47
Abdomen or pelvis and face	137	.06	Lower extremity and neck	20	.16	Lower extremity and neck	6.85
Back and neck	123	.06	Abdomen or pelvis and face	19	.15	Back	6.04
Back and face	108	.05	Back and head	18	.14	Face and lower extremity	5.89
Abdomen or pelvis and head	100	.05	Head and neck	18	.14	Genital organs and lower extremity	5.89

TABLE 28.—*Battle injuries, American Expeditionary Forces—Single and multiple wounds, one or two regions*—Continued.

Section A.—Admissions—Absolute numbers and per cent for each of total.			Section B.—Deaths in hospitals—Absolute numbers and per cent for each of total.			Section C.—Case mortality in hospitals—Per cent of deaths to total cases.	
	Number.	Per cent.		Number.	Per cent.		Per cent.
Genital organs and upper extremity	87	.04	Genital organs	14	.11	Lower extremity	5.24
Abdomen or pelvis and genital organs	85	.04	Back and neck	14	.11	Neck and thorax	4.92
Abdomen or pelvis and spine	78	.04	Back and spine	13	.10	Neck	4.27
Spine and lower extremity	76	.04	Abdomen or pelvis and neck	11	.09	Face and upper extremity	3.64
Spine and thorax	62	.03	Head and spine	9	.07	Genital organs and upper extremity	3.45
Spine and upper extremity	49	.02	Back and face	9	.07	Thorax	3.43
Neck and genital organs	45	.02	Neck and spine	8	.06	Face and thorax	2.95
Abdomen or pelvis and neck	34	.02	Abdomen or pelvis and genital organs	8	.06	Face and neck	2.58
Back and genital organs	23	.01	Face and genital organs	7	.06	Genital organs	2.49
Back and spine	20	.01	Genital organs and upper extremity	3	.02	Genital organs and neck	2.22
Head and genital organs	18	.01	Genital organs and head	2	.02	Face	1.74
Head and spine	18	.01	Genital organs and neck	1	.01	Genital organs and thorax	1.74
Neck and spine	16	.01	Genital organs and spine	1	.01	Upper extremity	1.63
Face and spine	8	.00	Face and spine	1	.01	Face and genital organs	1.09
Genital organs and spine	2	.00				No region stated	13.55
			Total by regions	12,493	99.98		
Total by regions	215,250	100.00	No region stated	1,198	.....	Total case mortality	6.11
No regions stated	8,839	.....					
			Total deaths	13,691	.....		
Total wounded	224,089	.....					

ADMISSIONS BY REGIONS AND MILITARY AGENTS.

Table 29, Section A, shows the number of admissions by regions and by causative agent. It will be noted here that both the single and multiple regions are used. A wound is thus often recorded for two separate regions. The figures are comparative and not absolute.

Section B of Table 29 shows the distribution of the regions per 1,000 of each causative agent, while Section C shows the distribution of causative agents per 1,000 of each region.

Table 30, Sections A, B, and C show similar figures for deaths.

TABLE 29.—*Admissions, battle injuries, American Expeditionary Forces, 1917 and 1918—Regions by causative agents.*

SECTION A.—ADMISSIONS—ABSOLUTE NUMBERS.

Causative agents.	Regions.											
	No region specified.	Abdomen or pelvis.	Back.	Face.	Genital organs.	Head.	Lower extremity.	Neck.	Spine.	Thorax.	Upper extremity.	Total.
None or not stated	345	26	47	43	5	71	440	8	7	37	232	1,261
Aerial bombing	10	4	8	8	1	17	46	3	.....	9	44	150
Aeroplane	6	2	4	9	.....	11	22	.....	3	5	26	88
Explosions	39	14	36	69	.....	534	98	4	38	17	97	946
Crushing	.....	4	1	2	.....	.....	54	.....	.....	3	21	85
Cutting and piercing instruments (other)	2	1	4	11	.....	8	49	2	.....	2	67	146
Bayonet	1	4	2	13	.....	6	132	5	.....	10	72	245
Saber	1	2	1	.....	.....	.....	6	.....	1	.....	3	14
Gas, poisonous (kind not stated)	2,674	537	62	5,784	685	43	431	1,543	2	27,988	165	39,914
Chlorine	48	52	1	145	6	1	9	57	.....	1,768	2	2,089
Mustard gas	3,271	355	263	8,778	1,940	142	1,663	940	2	20,922	620	38,896
Phosgene	136	117	2	385	22	2	24	148	.....	6,601	11	7,448
Arsine	110	6	.....	52	3	.....	2	10	.....	450	.....	633
Gunshot missile (kind not specified)	1,253	2,905	3,469	4,225	327	5,405	33,410	1,564	338	4,872	27,364	85,132
Pistol ball	.....	20	1	3	3	3	127	3	2	10	85	257
Rifle ball	35	848	823	776	121	733	9,598	373	154	1,375	7,700	22,536
Shell	432	771	1,030	1,263	107	1,443	8,291	419	80	1,268	6,208	21,312
Shrapnel	385	1,045	1,925	2,383	170	2,645	16,288	786	149	2,061	12,611	40,448
Hand grenade	10	42	40	125	8	79	444	13	3	41	351	1,156
Falling objects	20	7	30	5	.....	23	54	2	8	19	25	193
Indirect result of military agents	30	42	201	50	9	267	463	6	66	48	151	1,333
Others	31	65	119	122	10	135	876	10	26	78	358	1,830
Total	8,839	6,869	8,069	24,251	3,417	11,568	72,527	5,896	879	67,584	56,213	[1] 266,112

[1] Including 42,023 admissions due to 42,023 wounds involving two regions; actual number of admissions, 224,089.

SECTION B.—REGION DISTRIBUTION PER 1,000 OF EACH CAUSATIVE AGENT.

[Ratio per 1,000.]

None or not stated	273.56	20.62	37.27	34.10	3.97	56.31	348.93	6.34	5.55	29.35	184.00	1,000.00
Aerial bombing	66.67	26.67	53.33	53.33	6 67	113.33	306.67	20.00	.....	60.00	293.33	1,000.00
Aeroplane	68.18	22.73	45.46	102.27	.....	125.00	250.00	.....	34.09	56.82	295.45	1,000.00
Explosions	41.23	14.80	38.05	72.94	.....	564.48	103.59	4.23	40.17	17.97	102.54	1,000.00
Crushing	.....	47.06	11.76	23.53	.....	.....	635.29	.....	.....	35.30	247.06	1,000.00

Cutting and piercing instruments (other)	13.70	6.85	27.40	75.34	.....	54.79	335.62	13.70	.....	13.70	458.90	1,000.00
Bayonet	4.08	16.33	8.16	53.06	.....	24.49	538.77	20.41	.....	40.82	293.88	1,000.00
Saber	71.43	142.86	71.43	.....	.....	.....	428.57	.....	71.43	.....	214.29	1,000.01
Gas, poisonous (kind not stated)	66.99	13.45	1.55	144.90	17.16	1.08	10.80	38.66	.05	701.21	4.13	999.98
Chlorine	22.98	24.89	.48	69.41	2.87	.48	4.31	27.28	.....	846.34	.96	1,000.00
Mustard gas	84.10	9.13	6.76	225.68	49.87	3.65	42.76	24.17	.05	537.90	15.94	1,000.01
Phosgene	18.26	15.71	.27	51.69	2.95	.27	3.22	19.87	.....	886.28	1.48	1,000.00
Arsine	173.78	9.48	.....	82.14	4.74	.....	3.16	15.80	.....	710.90	.....	1,000.00
Gunshot missile (kind not specified)	14.72	34.12	40.75	49.63	3.84	63.49	392.46	18.37	3.97	57.23	321.43	1,000.01
Pistol ball	.....	77.81	3.89	11.67	11.67	11.67	494.16	11.67	7.78	38.91	330.74	999.97
Rifle ball	1.55	37.63	36.52	34.43	5.37	32.53	425.90	16.55	6.83	61.02	341.68	1,000.01
Shell	20.27	36.18	48.33	59.23	5.02	67.71	389.04	19.66	3.75	59.50	291.30	999.99
Shrapnel	9.52	25.84	47.59	58.92	4.20	65.39	402.69	19.43	3.68	50.95	311.78	999.99
Hand grenade	8.65	36.33	34.60	108.13	6.92	68.34	384.10	11.25	2.59	35.47	303.63	1,000.01
Falling objects	103.63	36.27	155.44	25.91	.....	119.17	279.80	10.36	41.45	98.44	129.53	1,000.00
Indirect result of military agent	22.51	31.51	150.80	37.51	6.75	200.30	347.34	4.50	49.51	36.01	113.27	1,000.01
Others	16.94	35.52	65.03	66.66	5.46	73.76	478.69	5.46	14.21	42.64	195.63	1,000.00
Total	33.22	25.81	30.32	91.13	12.84	43.47	272.54	22.16	3.30	253.96	211.24	999.99

Section C.—CAUSATIVE AGENT, DISTRIBUTION PER 1,000 OF EACH REGION.

[Ratio per 1,000.]

None or not stated	39.03	3.79	5.82	1.77	1.46	6.14	6.07	1.36	7.96	.55	4.13	4.74
Aerial bombing	1.13	.58	.99	.33	.29	1.47	.63	.51	.....	.13	.78	.56
Aeroplane	.68	.29	.50	.37	.....	.95	.30	.....	3.41	.07	.46	.33
Explosions	4.41	2.04	4.46	2.85	.....	46.16	1.35	.68	43.23	.25	1.73	3.55
Crushing	.....	.58	.12	.08	.....	.....	.74	.....	.....	.04	.37	.32
Cutting and piercing instruments (other)	.23	.15	.50	.45	.....	.69	.68	.34	.....	.03	1.19	.55
Bayonet	.11	.58	.25	.54	.....	.52	1.82	.85	.....	.15	1.28	.92
Saber	.11	.29	.12	.....	.....	.....	.08	.....	1.14	.....	.05	.05
Gas, poisonous (kind not stated)	302.52	78.18	7.68	238.51	200.47	3.72	5.94	261.70	2.28	414.12	2.94	149.98
Chlorine	5.43	7.57	.12	5.98	1.76	.09	.12	9.67	.....	26.16	.04	7.85
Mustard gas	370.06	51.68	32.60	361.96	567.75	12.28	22.93	159.43	2.28	309.57	11.03	146.16
Phosgene	15.39	17.03	.25	15.88	6.44	.17	.33	25.10	.....	97.67	.20	27.99
Arsine	12.44	.87	.....	2.14	.88	.....	.....	1.70	.....	6.66	.....	2.38
Gunshot missile (kind not specified)	141.76	422.92	429.92	174.22	95.70	467.24	460.66	265.26	384.53	72.09	486.79	319.91
Pistol ball	.....	2.91	.12	.12	.88	.26	1.75	.51	2.28	.15	1.51	.97
Rifle ball	3.96	123.45	102.00	32.00	35.41	63.36	132.34	63.26	175.20	20.35	136.98	84.68
Shell	48.87	112.24	127.65	52.08	31.31	124.74	114.32	71.07	91.01	18.76	110.44	80.08
Shrapnel	43.56	152.13	238.57	98.26	49.75	228.65	224.58	133.31	169.51	30.50	224.34	151.99
Hand grenade	1.13	6.11	4.96	5.15	2.34	6.83	6.12	2.20	3.41	.61	6.24	4.34
Falling objects	2.26	1.02	3.72	.21	.....	1.99	.74	.34	9.10	.28	.44	.73
Indirect result of military agent	3.39	6.11	24.91	2.06	2.63	23.08	6.38	1.02	75.09	.71	2.69	5.01
Others	3.51	9.46	14.75	5.03	2.93	11.67	12.08	1.70	29.58	1.15	6.37	6.88
Total	999.98	999.98	1,000.01	999.99	1,000.00	1,000.01	999.99	1,000.01	1,000.01	1,000.00	1,000.00	999.97

TABLE 30.—*Deaths in hospital, battle injuries, American Expeditionary Forces, 1917 and 1918—Regions by causative agents*—Continued.

SECTION A.—DEATHS—ABSOLUTE NUMBERS.

Causative agents.	Regions.											
	No region specified.	Abdomen or pelvis.	Back.	Face.	Genital organs.	Head.	Lower extremity.	Neck.	Spine.	Thorax.	Upper extremity.	Total.
None or not stated	88	4	5	1	.....	13	21	1	4	6	9	152
Aerial bombing	7	1	3	.....	.....	1	4	.....	.....	2	4	22
Aeroplane	6	.....	.....	1	.....	4	1	.....	.....	1	.....	13
Explosions	.....	2	.....	1	.....	7	4	1	2	2	2	21
Crushing	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	3
Cutting and piercing instruments (other)	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Bayonet	.....	1	.....	.....	.....	.....	1	1	.....	1	1	5
Saber	.....	1	1	.....	.....	.....	2	.....	.....	.....	.....	4
Gas, poisonous, kind not stated	71	8	1	105	8	2	10	15	1	450	4	675
Chlorine	.....	.....	.....	2	.....	.....	.....	.....	.....	7	.....	9
Mustard gas	92	1	1	223	20	3	8	20	1	492	6	867
Phosgene	1	.....	.....	2	.....	.....	.....	.....	.....	65	.....	68
Arsine	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	3
Gunshot missile, kind not specified	595	1,513	432	225	38	1,015	2,834	161	186	1,302	1,286	9,587
Pistol ball	.....	9	.....	1	.....	.....	3	.....	.....	2	.....	15
Rifle ball	9	245	60	20	8	84	339	24	74	204	138	1,205
Shell	157	329	96	62	12	220	705	38	42	309	318	2,288
Shrapnel	143	356	110	70	12	229	875	38	63	297	444	2,637
Hand grenade	4	14	5	4	2	7	28	2	3	4	10	83
Falling objects	11	1	1	.....	.....	.....	2	.....	.....	.....	.....	15
Indirect result of military agent	.....	1	.....	.....	.....	3	4	.....	.....	.....	2	10
Others	14	5	1	1	1	17	15	.....	2	6	3	65
Total	1,198	2,492	716	718	101	1,605	4,859	301	378	3,153	2,227	[1] 17,748

[1] Including 4,027 deaths due to 4,027 wounds involving two regions; actual number of deaths, 13,691.

SECTION B.—CAUSATIVE AGENT DISTRIBUTION PER 1,000 OF EACH REGION.

[Ratio per 1,000.]

None or not stated	73.45	1.61	6.98	1.39	.....	8.10	4.32	3.32	10.58	1.90	4.04	8.57
Aerial bombing	5.84	.40	4.19	.....	.....	.62	.82	.....	.....	.63	1.80	1.24
Aeroplane	5.01	.....	.....	1.39	.....	2.49	.21	.....	.....	.32	.....	.73
Explosions	.....	.80	.....	1.39	.....	4.36	.82	3.32	5.29	.63	.90	1.18
Crushing	.....	.....	.....	.....	.....	.....	.62	.....	.....	.....	.....	.17

Cutting and piercing instruments (other)		.40										.06
Bayonet		.40					.21	3.32		.32	.45	.28
Saber		.40	1.40				.41					.23
Gas, poisonous, kind not stated	59.27	3.21	1.40	146.24	79.21	1.25	2.06	49.83	2.65	142.72	1.80	38.03
Chlorine				2.79						2.22		.51
Mustard gas	76.79	.40	1.40	310.58	198.03	1.87	1.65	66.45	2.65	156.04	2.69	48.85
Phosgene	.83			2.79						20.62		3.83
Arsine										.95		.17
Gunshot missile, kind not specified	496.66	607.14	603.35	313.37	376.24	632.40	583.25	534.88	492.06	412.94	577.45	540.17
Pistol ball		3.61		1.39			.62			.63		.85
Rifle ball	7.51	98.31	83.80	27.85	79.21	52.34	69.77	79.73	195.77	64.70	61.97	67.90
Shell	131.05	132.02	134.08	86.35	118.81	137.07	145.09	126.25	111.11	98.00	142.79	128.92
Shrapnel	119.37	142.86	153.63	97.49	118.81	142.68	180.08	126.25	166.67	94.20	199.37	148.58
Hand grenade	3.34	5.62	6.98	5.57	19.80	4.36	5.76	6.64	7.94	1.27	4.49	4.68
Falling objects	9.18	.40	1.40				.41					.85
Indirect result of military agent		.40				1.87	.82				.90	.56
Others	11.69	2.01	1.40	1.39	9.90	10.59	3.09		5.29	1.90	1.35	3.66
Total	999.99	999.99	1,000.01	999.98	1,000.01	1,000.00	1,000.01	999.99	1,000.01	999.99	1,000.00	1,000.02

Section C.—Region distribution for 1,000 of each causative agent.

[Ratio per 1,000.]

None or not stated	578.94	26.32	32.89	6.58		85.53	138.16	6.58	26.32	39.47	59.21	1,000.00
Aerial bombing	318.18	45.45	136.36			45.45	181.82			90.91	181.82	999.99
Aeroplane	461.54			76.92		307.69	76.92			76.92		999.99
Explosions		95.24		47.62		333.33	190.48	47.62	95.24	95.24	95.24	1,000.01
Crushing							1,000.00					1,000.00
Cutting and piercing instruments (other)		1,000.00										1,000.00
Bayonet		200.00					200.00	200.00		200.00	200.00	1,000.00
Saber		250.00	250.00				500.00					1,000.00
Gas, poisonous, kind not stated	105.19	11.85	1.48	155.55	11.85	2.96	14.81	22.22	1.48	666.67	5.93	999.99
Chlorine				222.22						777.78		1,000.00
Mustard gas	106.11	1.15	1.15	257.21	23.07	3.46	9.23	23.07	1.15	567.48	6.92	1,000.00
Phosgene	14.71			29.41						955.88		1,000.00
Arsine										1,000.00		1,000.00
Gunshot missile, kind not specified	62.07	157.82	45.06	23.47	3.96	105.87	295.61	16.79	19.40	135.81	134.14	1,000.00
Pistol ball		600.00		66.67			200.00			133.33		1,000.00
Rifle ball	7.47	203.32	49.79	16.60	6.64	69.71	281.33	19.92	61.41	169.29	114.52	1,000.00
Shell	68.62	143.79	41.96	27.10	5.24	96.15	308.13	16.61	18.36	135.05	138.99	1,000.00
Shrapnel	54.23	135.00	41.71	26.55	4.55	86.84	331.82	14.41	23.89	112.63	168.37	1,000.00
Hand grenade	48.19	168.67	60.24	48.19	24.10	84.34	337.35	24.10	36.14	48.19	120.48	999.99
Falling objects	733.33	66.67	66.67				133.33					1,000.00
Indirect result of military agent		100.00				300.00	400.00				200.00	1,000.00
Others	215.38	76.92	15.38	15.38	15.38	261.54	230.77		30.77	92.31	46.15	999.98
Total	67.51	140.41	40.34	40.46	5.69	90.43	273.78	16.96	21.30	177.65	125.48	1,000.01

MORTALITY BY REGIONS AND MILITARY AGENTS.

The comparative case mortality for regions by causative agents is shown in Table 28. It will be noted that the highest case mortality occurred in wounds of the spine, 43 per cent; the next highest in wounds of the abdomen and pelvis, 36.28 per cent. Among gunshot wounds the highest mortality occurred from gunshot missile, kind not specified, 9.98 per cent, and the second highest from shell, 9.77 per cent. Among the gases, mustard gas was attended with the highest case mortality, 2.16 per cent.

TABLE 31.—*Case mortality in hospital, battle injuries, American Expeditionary Forces, 1917 and 1918—Regions by causative agents.*

Causative agents.	Regions.												
	No region specified.	Abdomen or pelvis.	Back.	Face.	Genital organs.	Head.	Lower extremity.	Neck.	Spine.	Thorax.	Upper extremity	Total loss with excess cases and deaths.	Total with net cases and deaths.
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
None or not stated	25.51	15.38	10.64	2.33	.....	18.31	4.77	12.50	57.14	16.22	3.88	12.05	11.82
Aerial bombing	70.00	25.00	37.50	.....	.....	5.88	8.70	.....	.....	22.22	9.09	14.67	12.90
Aeroplane	100.00	.....	.....	11.11	.....	36.36	4.55	.....	.....	20.00	.....	14.77	16.22
Explosions	.....	14.28	.....	1.45	.....	1.31	4.08	25.00	5.26	11.76	2.06	2.22	1.71
Crushing	.....	.....	.....	.....	.....	.....	5.56	.....	.....	.....	.....	3.53	3.66
Cutting and piercing instruments (other)	.....	100.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.68	.72
Bayonet	.....	25.00	.....	.....	.....	.....	.76	20.00	.....	10.00	1.39	2.04	1.70
Saber	.....	50.00	100.00	.....	.....	.....	33.33	.....	.....	.....	.....	28.57	25.00
Gas, poisonous, kind not stated	2.66	1.49	1.61	1.82	1.17	4.65	2.32	.97	50.00	1.61	2.42	1.69	1.63
Chlorine	.....	.....	.....	1.38	.....	.....	.....	.....	.....	.40	.....	.43	.38
Mustard gas	2.81	.28	.38	2.54	1.03	2.11	.48	2.13	50.00	2.35	.97	2.23	2.16
Phosgene	.74	.....	.....	.52	.....	.....	.....	.....	.....	.98	.....	.91	.97
Arsine	.....	.....	.....	.....	.....	.....	.....	.....	.....	.67	.....	.47	.52
Gunshot missile, kind not specified	47.49	52.08	12.45	5.33	11.62	18.78	8.48	10.29	55.03	26.73	4.70	11.26	9.98
Pistol ball	.....	45.00	.....	33.33	.....	.....	2.36	.....	.....	20.00	.....	5.84	5.37
Rifle ball	25.71	28.89	7.29	2.58	6.61	11.46	3.53	6.43	48.05	14.84	1.79	5.35	4.71
Shell	36.34	42.67	9.32	4.91	11.21	15.25	8.50	9.07	52.50	24.37	5.12	10.74	9.77
Shrapnel	37.14	34.07	5.71	2.94	7.06	8.66	5.37	4.83	42.28	14.41	3.52	6.52	5.88
Hand grenade	40.00	33.33	12.50	3.20	25.00	8.86	6.31	15.38	100.00	9.76	2.85	7.18	6.36
Falling objects	55.00	14.29	3.33	.....	.....	.....	3.70	.....	.....	.....	.....	7.77	8.33
Indirect result of military agent	.....	2.38	.....	.....	.....	1.12	.86	.....	.....	.....	1.32	.75	.71
Others	45.16	7.69	.84	.82	10.00	12.59	1.71	.....	7.69	7.69	.84	3.55	3.49
Total	13.55	36.28	8.87	2.96	2.96	13.88	6.70	5.11	43.00	4.67	3.96	6.67	6.11

Calculated on 266,112 admissions, including 42,023 admissions due to 42,023 wounds involving two regions, and on 17,748 deaths, including 4,027 deaths due to 4,027 wounds involving two regions; actual number of admissions 224,089 and deaths 13,691.

GUNSHOT WOUNDS.

REGIONAL DISTRIBUTION.

It now remains to consider under the subject of military agents, the wounds received as a result of gunshot missiles alone.

Multiple wounds.—In considering the question of wounds by gunshot missiles, both single and multiple wounds are used. Some comparisions are made with the corresponding figures for the Civil

War. It is interesting to note that in the Medical and Surgical History of the Civil War no attempt was made to show the number of regional multiple wounds. Tables were, however, prepared to show wounds of two parts or organs in the same region. It is stated that "it is impossible to give even an approximate estimate of the frequency of the cases in which several wounds were found in the same individual. The cases were classed with those injuries which seemed to be the greatest." No doubt, however, multiple wounds were more frequent in the World War than in the Civil War, due, as stated, to the greater effectiveness of artillery fire and the use of machine guns.

Wounds, Civil War and World War.—During the Civil War 245,790 wounds received by Northern soldiers as a result of gunshot fire were tabulated. During the World War 147,651 American soldiers were wounded by gunshot fire, with a total of 170,841 wounds. It is of interest to compare the regional location of these wounds. Table 32 shows that in the Civil War 70.86 per cent of the gunshot wounds were of the extremities and in the World War 72.62 per cent, and in the Civil War 29.15 per cent were of the trunk and head and in the World War 27.41 per cent.

Killed and wounded.—It is, however, not to be inferred that the wounds which resulted in death upon the battle field were distributed by regions in the same proportion. The Medical and Surgical History of the Civil War furnishes statistics on 1,173 men killed n action.

TABLE 32.—*Gunshot wounds by regions, Civil War and World War, United States troops*

	Civil War.			World War.		
	Wounded.	Killed in action.[1]	Total.	Wounded.[2]	Killed in action.[1]	Total.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Head[3]	10.77	41.51	15.46	13.18	41.51	17.47
Trunk	18.38	51.41	23.41	14.23	51.41	19.86
Upper extremity	35.71	2.56	30.65	32.23	2.56	27.72
Lower extremity	35.15	4.52	30.47	40.39	4.52	31.94

[1] Based on statistics of 1,173 killed in action in the Civil War.
[2] Proportioned to include region not stated.
[3] Head includes face and neck.

It is apparent that the majority of the wounds that were fatal on the field of action were of the head and trunk. Presuming that this proportion would hold good for the World War, and distributing the 34,249 reported by The Adjutant General's Office as having been killed in action in the late war and the 44,238 in the Civil War, and adding these calculated figures by regions to the wounded by regions and then comparing the figures, it is found that the wounds of the trunk in the Civil War amounted to 38.07 per cent and the World War 37.33, and of the extremities in the Civil War to 61.12 and the World War 62.66. It is thus apparent that approximately three-fifths of the total number of wounds received in action in both wars, whether resulting in death on the field or in admission to hospital, were of the extremities, and that the remaining two-fifths were of the trunk, including the head and neck.

Foreign wars.—The footnote on Table 33 shows that in the various foreign wars which occurred between 1830 and 1877, with an aggregate number of wounded of 462,087, the distribution of all wounds was: Head, neck, and face 12.05 per cent, trunk 19.6 per cent, total

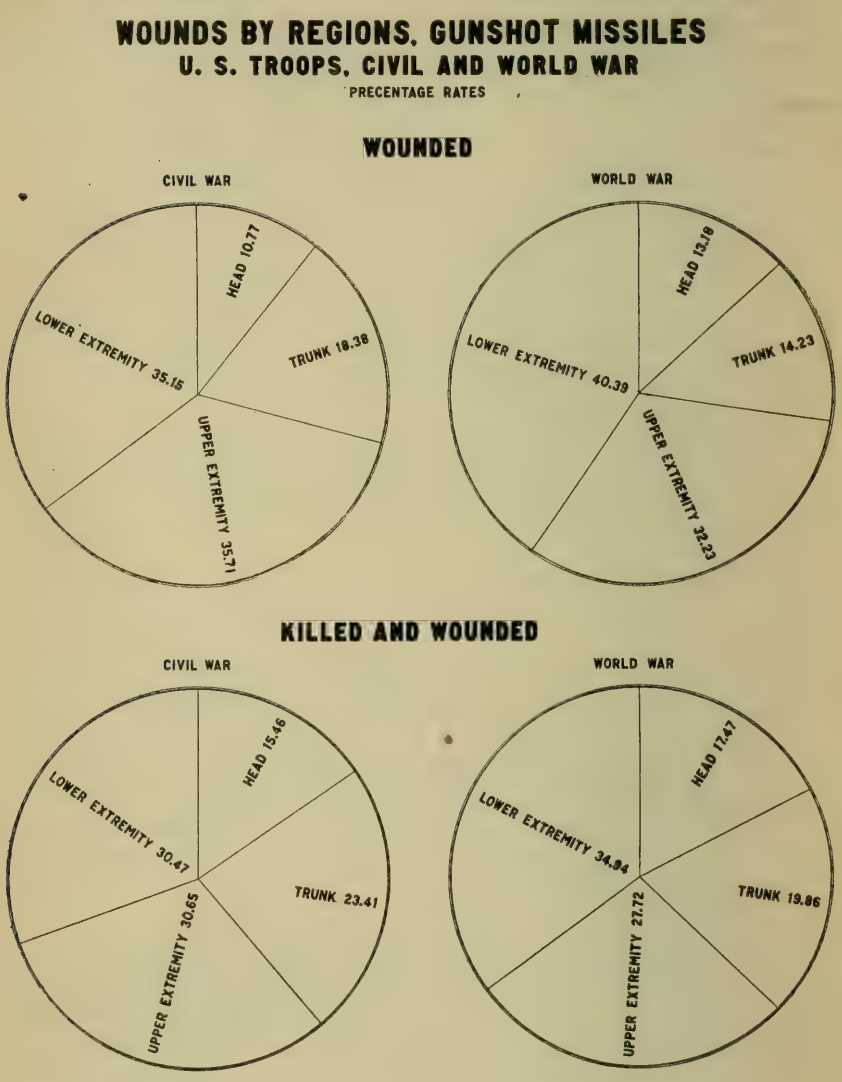


FIG. 8.

head, neck, and trunk, 31.65 per cent; upper extremity 33.3 per cent, lower extremity, 34.5 per cent; total extremities, 67.8 per cent.

Regions.—Table 33 also shows the number of wounds by regions, number of deaths by regions, the distribution of regions, and the case mortality.

TABLE 33.—*Gunshot wounds by regions, Civil War and World War, United States troops.*

	Number of cases.		Deaths.		Case mortality.		Relative frequency.	
	Civil War.[3]	World War.	Civil War.	World War.	Civil War.	World War.	Civil War.	World War.
					Per cts.	*Per cts.*	*Per cts.*	*Per cts.*
Abdomen and pelvis	8,723	5,631	4,079	2,466	46.8	43.79	4.25	3.30
Genital organs	1,149	736	144	72	12.5	9.78	.47	.43
Back	11,683	7,288	800	703	6.9	9.65	5.16	4.27
Face	7,868	8,775	462	382	5.8	4.35	3.87	5.14
Head	9,249	10,308	2,676	1,555	28.9	15.09	4.91	6.03
Neck	4,114	3,158	618	263	15.0	8.33	1.99	1.85
Spine	628	726	349	368	55.5	50.69	.26	.42
Thorax	19,294	9,627	5,373	2,118	27.8	22.00	8.24	5.64
Upper extremity	85,698	54,319	5,608	2,196	6.5	4.04	35.71	31.80
Lower extremity	85,478	68,158	11,813	4,784	13.8	7.02	35.15	39.90
Region not stated	.....	2,115	.....	908	.....	42.93	.....	1.24
Total	233,884	[1] 170,841	31,922	[2] 15,815	13.6	9.26	100.01	100.02

[1] Including 23,190 admissions due to 23,190 gunshot wounds, involving two regions.
[2] Including 3,623 deaths due to 3,623 gunshot wounds involving two regions.
[3] Excluding cases of undetermined results.

Statistics for various wars from 1830 through 1877, with aggregate number of cases 462,087, show distribution as follows: Head, neck, and face, 57,584, or 12.5 per cent; trunk, 90,767, or 19.6 per cent; upper extremity, 154,268, or 33.3 per cent; lower extemity, 159,519, or 34.5 per cent.

Table 34, sections A, B, and C, shows the gunshot wounds by regions and by the character of the missiles, with the distribution for regions and for missiles. As has been previously pointed out, the great difference apparent in the wounds received in the late war as compared with the Civil War was the greater effectiveness of artillery fire.

TABLE 34.—*Gunshot wounds, by regions and missiles, Civil War and World War, United States troops.*

SECTION A.—ABSOLUTE NUMBERS.

Location.	Shell and cannon ball.		Grape, canister, shrapnel.		Small arms, hand grenade.		Missile not specified.		Total.	
	Civil War.	World War.	Civil War.	World War.	Civil War.	World War.	Civil War.	World War.	Civil War.[1]	World War.
Abdomen and pelvis	429	771	44	1,045	4,877	910	5,095	2,905	10,445	5,631
Genital organs	47	107	6	170	508	132	591	327	1,152	736
Back	1,803	1,030	50	1,925	8,340	864	2,488	3,469	12,681	7,288
Face	768	1,263	39	2,383	5,082	904	3,527	4,225	9,416	8,775
Head	1,446	1,443	42	2,645	5,076	815	5,525	5,405	12,089	10,308
Neck	174	419	11	786	2,325	389	2,385	1,564	4,895	3,158
Spine	60	80	5	149	488	159	89	338	642	726
Thorax	1,238	1,268	71	2,061	8,863	1,426	10,092	4,872	20,264	9,627
Upper extremity	3,006	6,208	395	12,611	39,061	8,136	45,331	27,364	87,793	54,319
Lower extremity	3,908	8,291	490	16,288	50,171	10,169	31,844	33,410	86,413	68,158
Not stated	.....	432	.....	385	.....	45	.....	1,253	.....	2,115
Total	12,879	21,312	1,153	40,448	124,771	23,949	106,967	85,132	245,790	[2] 170,841

[1] Including cases of undetermined results.
[2] Including 23,190 admissions due to 23,190 gunshot wounds involving two regions.

TABLE 34.—*Gunshot wounds, by regions and missiles, Civil War and World War, United States troops*—Continued.

SECTION B.—MISSILE DISTRIBUTION PER 1,000 FOR EACH REGION.

Location.	Shell and cannon ball.		Grape, canister, shrapnel.		Small arms, hand grenade.		Missile not specified.		Total.	
	Civil War.	World War.	Civil War.	World War.	Civil War.	World War.	Civil War.	World War.	Civil War.	World War.
Abdomen and pelvis	41.07	136.92	4.21	185.58	466.92	161.61	487.79	515.89	999.99	1,000.00
Genital organs	40.80	145.38	5.21	230.98	440.97	179.35	513.02	444.29	1,000.00	1,000.00
Back	142.18	141.33	3.94	264.13	657.67	118.55	196.20	475.99	999.99	1,000.00
Face	81.56	143.93	4.14	271.57	539.72	103.02	374.57	481.48	999.99	1000.00
Head	119.61	140.00	3.47	256.60	419.89	79.07	457.03	524.35	1,000.00	1,000.02
Neck	35.69	132.68	2.26	248.89	472.82	123.18	489.23	495.25	1,000.00	1,000.00
Spine	93.46	110.19	7.79	205.23	760.13	219.01	138.63	465.56	1,000.01	999.99
Thorax	61.10	131.71	3.50	214.09	437.38	148.13	498.03	506.08	1,000.01	1,000.01
Upper extremity	34.24	114.29	4.50	232.17	444.92	149.79	516.34	503.77	1,000.00	1,000.02
Lower extremity	45.23	121.65	5.67	238.98	580.59	149.20	368.51	490.18	1,000.00	1,000.01
Not stated	.....	204.23	.....	182.03	.....	21.28	.....	592.43	.....	999.97
Total	52.39	124.74	4.69	236.75	507.71	140.18	435.20	498.31	999.99	999.98

SECTION C.—REGION DISTRIBUTION PER 1,000 FOR EACH MISSILE.

Abdomen and pelvis	33.31	36.18	38.16	25.84	39.09	38.00	47.64	34.12	42.50	32.96
Genital organs	3.65	5.02	5.20	4.20	4.07	5.51	5.53	3.84	4.69	4.31
Back	140.00	48.33	43.37	47.60	66.85	36.08	23.26	40.75	51.61	42.66
Face	59.63	59.26	33.82	58.92	40.74	37.75	32.98	49.63	38.32	51.37
Head	112.28	67.71	36.43	65.40	40.69	34.03	51.66	63.49	49.19	60.33
Neck	13.51	19.66	9.54	19.43	18.48	16.24	22.30	18.37	19.84	18.49
Spine	4.66	3.75	4.34	3.68	3.91	6.64	.83	3.97	2.61	4.25
Thorax	96.13	59.50	61.58	50.96	71.04	59.54	94.35	57.23	82.45	56.35
Upper extremity	233.40	291.29	342.59	311.78	313.06	339.72	423.78	321.43	357.22	317.95
Lower extremity	303.44	389.03	424.98	402.69	402.10	424.61	297.70	392.44	351.60	398.96
Not stated	.....	20.27	.....	9.52	.....	1.88	.....	14.72	.....	12.38
Total	1,000+	1,000+	1,000+	1,000+	1,000+	1,000+	1,000+	999.99	1,000+	1,000+

CASE MORTALITY, CIVIL WAR AND WORLD WAR.

Total.—Considering the actual number of cases, the case mortality in the Civil War for gunshot wounds was 13.6 per cent and in the late war 8.26 per cent. There was thus a saving in life in the World War for the American troops of 5.34 per 100 men treated in hospital. Of the 147,651 men wounded by gunshot fire, 20,080 would have died if treated as during the Civil War period, whereas only 12,192 died. When the more destructive effects of the military agents are considered, with the greater preponderance of artillery missiles and undoubtedly the higher percentage of multiple wounds, it is evident that the saving of life was much greater than is apparent from these figures.

Regions.—Table 33, which has been previously discussed, shows the multiple as well as the single wounds. Consequently, we are here dealing with an excess number of cases and an excess number of deaths. It will be observed that the case mortality in this table shows no change for the Civil War, it being 13.6, but that it was raised to 9.26 for the World War as a result of considering two regions for multiple wounds. Even with this disadvantage apparent there was a marked reduction in the case mortality for the various regions, with the exception of the back. The higher mortality in this region was no

doubt due to the greater destructive effect of the artillery missiles, and of the larger proportional number of multiple wounds. The most marked lowering of the case mortality was apparent in the head and neck, where it was reduced for the head from 28.9 to 15.09, and for the neck from 15.0 to 8.33. There was also a marked reduction for wounds of the upper and lower extremities, which was for the upper extremity reduced from 6.5 to 4.04 and for the lower from 13.8 to 7.02.

Organs or parts.—Table 35 has been prepared to show for individual parts or organs the number of cases, deaths, and case mortality. For the World War we are here also considering multiple wounds as well as single wounds. In some of the parts of the body, especially of the joints, additional study is necessary before final conclusions can be drawn and satisfactory comparisons can be made with the figures of the Civil War. It will be noted, however, for such comparisons as are made that there was a marked reduction in the case mortality of practically all the parts considered. Only a few show any increase, viz, the liver, the urinary bladder, and the rectum, and in these cases the increase is small and no doubt due to the greater destructive effect and relatively greater frequency of the artillery missiles.

TABLE 35.—*Gunshot wounds, by anatomical parts, Civil War and World War, United States troops.*

	Number of cases.		Deaths.		Case mortality.	
	Civil War.[1]	World War.	Civil War.	World War.	Civil War.	World War.
					Per cent.	*Per cent.*
Trachea	48	60	23	21	47.92	35.00
Larynx	27	249	12	34	44.44	13.65
Pharynx	17	46	9	9	52.94	19.57
Esophagus	14	5	8	3	57.14	60.00
Stomach	79	182	60	100	75.95	54.95
Intestines	602	742	484	512	80.39	69.00
Liver	170	252	108	167	63.53	66.27
Spleen	29	49	27	31	93.11	63.26
Pancreas	5	4	4	2	80.00	50.00
Kidney	77	129	51	72	66.23	55.81
Bladder	185	127	96	68	51.89	53.54
Rectum	103	104	44	47	42.72	45.19
Genital organs	997	997	129	93	12.94	9.33
Clavicle and scapula	2,250	1,333	314	93	13.95	6.98
Humurus	7,888	4,172	1,639	377	20.78	9.04
Radius and ulna	5,118	4,744	482	189	9.42	3.98
Wrist, bones of	1,485	2,168	193	39	12.99	1.80
Hand, bones of	9,960	16,134	316	216	3.17	1.34
Femur	6,549	3,367	3,434	917	52.43	27.23
Tibia and fibula	8,893	6,886	2,402	946	27.01	13.74
Foot	5,859	9,032	451	250	7.70	2.77

[1] Excluding cases of undetermined result.

Civil War figures for bones of upper and lower extremities include contusions and fractures.

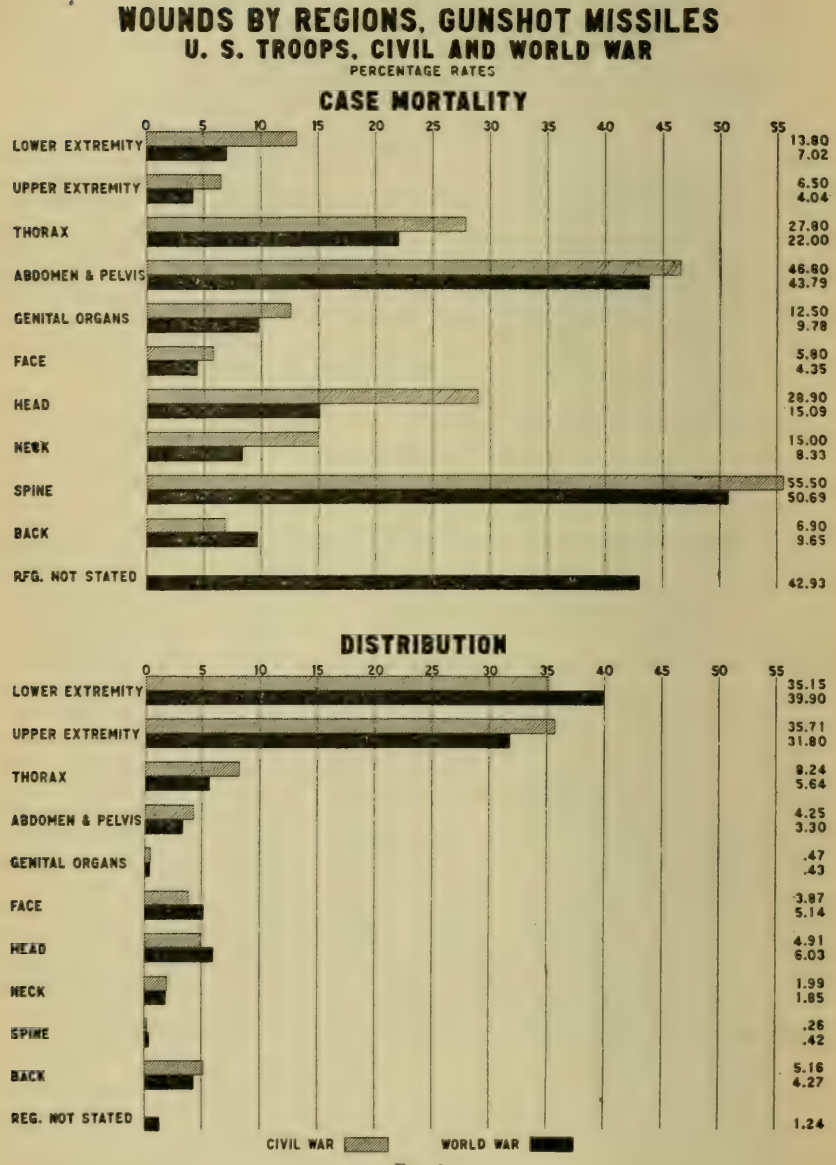

WOUNDS BY REGIONS, GUNSHOT MISSILES
U. S. TROOPS, CIVIL AND WORLD WAR
PERCENTAGE RATES
CASE MORTALITY
0 5 10 15 20 25 30 35 40 45 50 55
LOWER EXTREMITY 13.80 7.02
UPPER EXTREMITY 6.50 4.04
THORAX 27.80 22.00
ABDOMEN & PELVIS 46.80 43.79
GENITAL ORGANS 12.50 9.78
FACE 5.80 4.35
HEAD 28.90 15.09
NECK 15.00 8.33
SPINE 55.50 50.69
BACK 6.90 9.65
RFG. NOT STATED 42.93
DISTRIBUTION
0 5 10 15 20 25 30 35 40 45 50 55
LOWER EXTREMITY 35.15 39.90
UPPER EXTREMITY 35.71 31.80
THORAX 8.24 5.64
ABDOMEN & PELVIS 4.25 3.30
GENITAL ORGANS .47 .43
FACE 3.87 5.14
HEAD 4.91 6.03
NECK 1.99 1.85
SPINE .26 .42
BACK 5.16 4.27
REG. NOT STATED 1.24
CIVIL WAR
WORLD WAR

FIG. 9.

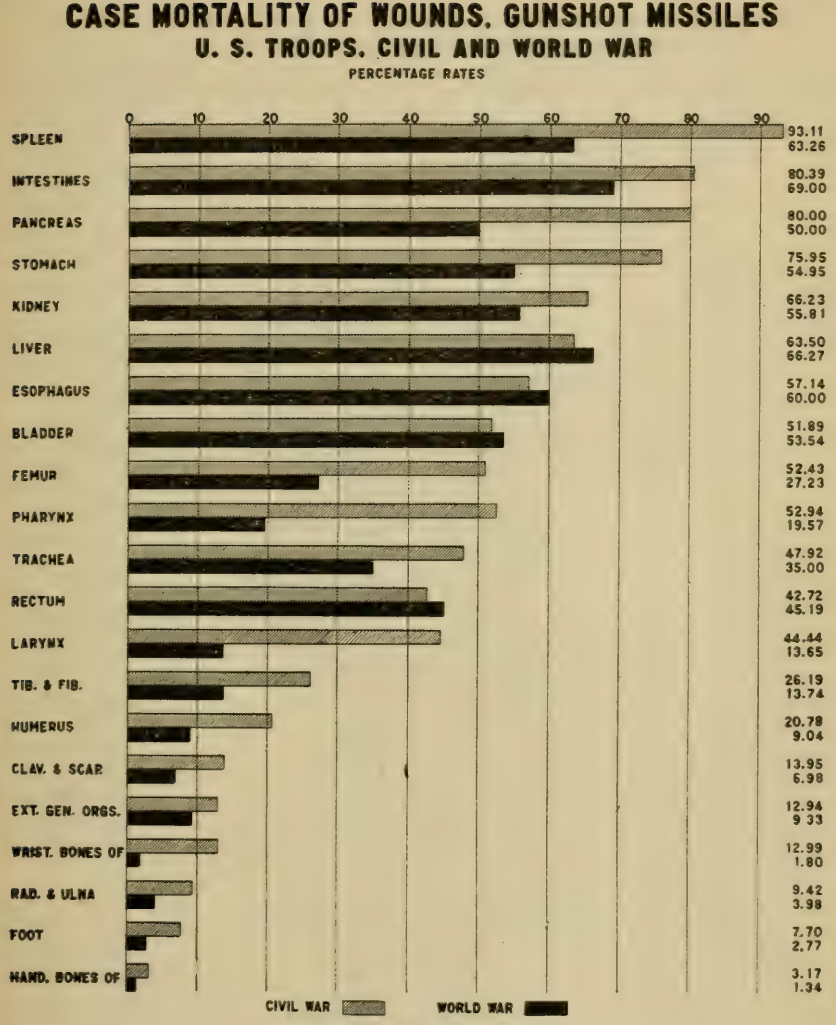

CASE MORTALITY OF WOUNDS, GUNSHOT MISSILES
U. S. TROOPS, CIVIL AND WORLD WAR
PERCENTAGE RATES
0
10
20
30
40
50
60
70
80
90
SPLEEN 63.26 93.11
INTESTINES 69.00 80.39
PANCREAS 50.00 80.00
STOMACH 54.95 75.95
KIDNEY 55.81 66.23
LIVER 66.27 63.50
ESOPHAGUS 60.00 57.14
BLADDER 53.54 51.89
FEMUR 27.23 52.43
PHARYNX 19.57 52.94
TRACHEA 35.00 47.92
RECTUM 45.19 42.72
LARYNX 13.65 44.44
TIB. & FIB. 13.74 26.19
HUMERUS 9.04 20.78
CLAV. & SCAP. 6.98 13.95
EXT. GEN. ORGS. 9.33 12.94
WRIST, BONES OF 1.80 12.99
RAD. & ULNA 3.98 9.42
FOOT 2.77 7.70
HAND, BONES OF 1.34 3.17
CIVIL WAR
WORLD WAR

FIG. 10.

CASE MORTALITY, WORLD WAR, VARIOUS ORGANS AND PARTS, BY GUNSHOT MISSILES.

Table 36 shows for the more important anatomical parts and locations the number of wounds by gunshot missiles, the number of deaths, and the case mortality. However, as stated above, before comparisons can be made with such other figures of the Civil War as are available additional tabulations are necessary.

TABLE 36.—*Gunshot (battle) injuries, American Expeditionary Forces, treated in hospitals, 1917 and 1918—Admissions, deaths, and case mortality—Regions, locations, and parts.*

Location and tissue.	Admissions.	Deaths.	Case mortality.
Abdomen and pelvis:			
Parts—			
Cecum	31	19	61.29
Colon	227	169	74.45
Sigmoid	52	12	23.08
Rectum	104	47	45.19
Duodenum	10	8	80.00
Jejunum	33	26	78.79
Ileum	100	73	73.00
Intestines, small (not specified)	289	205	70.94
Stomach	182	100	54.95
Liver	252	167	66.27
Gall bladder	9	7	77.78
Spleen	49	31	63.26
Pancreas	4	2	50.00
Diaphragm	67	42	62.29
Appendix	5	1	20.00
Kidney	129	72	55.81
Bladder	127	68	53.54
Ureter	4	2	50.00
Peritoneum	162	108	66.67
Omentum	37	22	59.46
Mesentery	13	6	46.16
Ilium	345	107	31.02
Ischium	89	17	19.10
Pubic bone	65	16	24.62
Location—			
Epigastric region	57	6	10.53
Hypogastric region	12	2	16.67
Hypochondriac region	67	10	14.93
Iliac region	340	22	6.47
Inguinal region	554	117	21.12
Umbilical region	37	8	21.62
Rectus abdominis	30	6	20.00
Back:			
Parts and location—			
Interscapular region	38	3	7.89
Cervical region	110	35	31.82
Dorsal region	499	97	19.44
Lumbar region	1,652	143	8.66
Lumbo-sacral region	20	1	5.00
Sacral region	252	48	19.05
Coccyx	16	4	25.00
Erector spinae	4	1	25.00
Face:			
Parts—			
Eye	3,157	395	12.51
Cheek	2,873	52	1.81
Lip, lower	125	2	1.60
Lip, upper	297	3	1.01
Lips, both	33	1	3.03
Nose	673	9	1.34
Tongue	49	7	14.29
Malar	67	4	5.97
Vomer	19	1	5.26
Zygoma	30	1	3.33
Maxilla, inferior	1,166	102	8.75
Maxilla, superior	330	20	6.06
Nasal bone	79	1	1.27
Face—Continued.			
Parts—Continued.			
Facial nerve	38	1	2.63
Mouth	106	6	5.66
Chin	432	13	3.01
Infraorbital region	104	1	.96
Orbital region	70	3	4.29
Genital organs:			
Parts and location—			
Penis	171	10	5.85
Scrotum	499	51	10.22
Testicle	237	18	7.59
Urethra	39	7	17.95
Perineum	51	7	13.73
Head:			
Parts—			
Brain	1,234	364	29.49
Ventricle	2	2	100.00
Skull base	332	226	68.07
Skull vault	459	257	55.99
Frontal bone	385	97	25.19
Mastoid bone	71	7	9.86
Occipital bone	258	66	25.58
Parietal bone	418	114	27.27
Temporal bone	251	72	28.68
Auricle	241	2	.83
Ear	618	5	.81
Scalp	2,177	46	2.11
Location—			
Forehead	872	25	2.87
Frontal region	344	14	4.07
Mastoid region	889	13	1.46
Occipital region	731	26	3.56
Parietal region	622	34	5.47
Supraorbital region	402	5	1.24
Temporal region	839	40	4.77
Lower extremity:			
Parts—			
Greater trochanter	77	8	10.39
Acetabulum	19	6	31.58
Femur	3,367	917	27.23
Patella	466	47	10.09
Fibula	2,368	345	14.57
Tibia	4,518	601	13.30
Astragalus	272	7	2.57
Calcaneum	366	9	2.46
Cuboid	55	1	1.82
Malleolus	332	14	4.22
Metatarsus	1,307	24	1.84
Tarsus	252	15	5.95
Adductor muscles	12	1	8.33
Biceps femoris	11	1	9.09
Gastrocnemius	32	2	6.25
Gluteal	5,141	404	7.86
Quadriceps extensor femoris	19	1	5.26
Tendoachilles	68	.....	.....
Popliteal nerve	32	.....	.....
Sciatic nerve, great	321	13	4.05
Tibial nerve, anterior	30	2	6.67

TABLE 36.—*Gunshot (battle) injuries, American Expeditionary Forces, treated in hospitals, 1917 and 1918—Admissions, deaths, and case mortality—Regions, locations, and parts*—Continued.

Location and tissue.	Admissions.	Deaths.	Case mortality.
Lower extremity—Continued.			
Parts—Continued.			
Tibial nerve, posterior	30	2	6.67
Femoral artery	78	26	33.33
Popliteal artery	27	1	3.70
Saphenous vein, external	12	5	41.67
Saphenous vein, internal	4	1	25.00
Tibial artery, anterior	49	10	20.41
Tibial artery, posterior	27	4	14.81
Location—			
Hip	3,094	260	8.40
Thigh	21,403	1,184	5.53
Knee	5,159	215	4.17
Popliteal space	354	17	4.80
Leg	18,231	1,160	6.36
Ankle	2,295	43	1.87
Heel	861	8	.93
Foot	5,700	172	3.02
Great toe	101	6	5.94
Toe	889	9	1.01
Neck:			
Parts—			
Bronchus	4,485	558	12.44
Larynx	249	34	13.65
Pharynx	46	9	19.57
Trachea	60	21	35.00
Cartoid artery	26	11	42.31
Jugular vein	26	13	50.00
Hyoid bone	15	2	13.33
Sternocleidomastoid	25	2	8.00
Location—			
Submaxillary	11	1	9.09
Submental	25	1	4.00
Spine:			
Parts and location—			
Spinal cord	221	170	76.92
Vertebra	411	151	36.74
Thorax:			
Parts—			
Esophagus	5	3	60.00
Lungs	1,773	1,181	66.61
Pericardium	15	9	60.00
Pleura	564	193	34.22
Costal cartilage	16	1	6.25
Pectoral muscles	100	6	6.00
Rib	747	188	25.17
Sternum	23	2	8.70
Location—			
Heart and aorta	150	31	20.67
Infraclaricular region	63	5	7.94
Inframammary region	33	3	9.09
Thorax—Continued.			
Location—Continued.			
Infrascapular region	103	1	0.97
Mammary region	230	20	8.70
Mediastinum region	9	1	11.11
Scapular region	1,410	44	3.12
Sternal region	74	2	2.70
Subclavicular	36	5	13.89
Supraclavicular	50	3	6.00
Suprascapular	56	1	1.79
Upper extremity:			
Parts—			
Humurus	4,172	377	9.04
Radius	2,536	116	4.53
Ulna	2,208	73	3.31
Olecranon	248	15	6.05
Scapula	832	61	7.33
Clavicle	501	32	6.39
Carpus	211	6	2.84
Trapezoid	13	1	7.69
Unciform	20	1	5.00
Scaphoid	57	1	1.75
Metacarpus	1,866	40	2.14
Finger	644	7	1.09
Finger, index	2,213	17	.77
Finger, little	1,089	7	.64
Finger, middle	1,527	11	7.22
Finger, ring	1,085	4	3.69
Thumb	1,154	10	.87
Location—			
Radio carpal	3	1	33.33
Shoulder	9,295	459	4.94
Shoulder joint	68	3	4.31
Arm	13,071	665	5.09
Elbow	1,553	41	2.64
Forearm	5,727	141	2.46
Hand	8,422	160	1.96
Wrist	1,874	30	1.00
Axillary artery	5	2	40.00
Brachial artery	86	6	6.98
Radial artery	41	1	2.44
Ulnar artery	27	1	3.70
Median cephalic vein	3	1	33.33
Median vein	11	1	9.09
Brachial plexus	105	2	1.90
Median nerve	263	3	1.14
Musculospiral nerve	480	4	.83
Ulnar nerve	469	7	1.49
Acromial region	80	2	2.50
Axilla	666	42	6.31
Deltoid muscle	230	2	.87

FINAL RESULTS (DEFINITE DISABILITIES).

CASES.

Number.—Tables 37, 38, 39, and 40 show the final results from the battle injuries in such cases as the information furnished was neither too indefinite or too general in character to catalogue nor shown as associate disease. These final results are shown for 19,768 men of the 20,588 who were discharged for disability, and of the 5,768 cases remaining in hospital on December 31, 1919. Thus, in 6,588 cases the final results were not tabulated; all of the more important are, however, shown. Some additional conditions carded as associated diseases will be shown later.

Amputations.—In Table 37 some of the more interesting final results are condensed. From this table it will be seen that the total number of soldiers who lost part of one or more extremities was 4,403. No soldier who recovered lost both arms and both legs combined, nor did any soldier who recovered lose both arms or legs with one of the other extremities. Eleven had amputation through both thighs, 1 both legs at the knee, 9 both legs below the knee, 1 both feet, and 3 one arm above the elbow and one leg through the thigh. A study of this table will show the other losses in detail.

Loss of eyes.—If traumatic cataract is counted as the loss of sight of an eye, 66 men either lost both eyes or the sight of them. In 44 cases the loss of sight of both eyes was partial, and 644 men lost one eye or the sight of one eye.

Ankylosis.—Four thousand nine hundred and seventy soldiers had a partial or complete ankylosis of one or more joints.

TABLE 37.—*Summary: Loss of extremities, loss of eyesight, and ankylosis of joints—Final result, battle injuries, American Expeditionary Forces, 1917 and 1918.*

Injuries.	Number.
Loss of extremities.	
Upper extremity:	
One arm above elbow	550
One arm at elbow	41
Both forearms	3
One forearm	212
One hand at wrist	26
Both hands	1
One hand	18
Part of both hands	4
Part of one hand	1,481
One arm and one forearm	1
One arm above elbow and part of hand	4
One arm below elbow and part of hand	1
One forearm and one hand	2
One hand and part of hand	2
Total	2,346
Lower extremities:	
Both thighs	11
One thigh	1,137
Both legs at knee	1
One leg at knee	95
Both legs below knee	9
One leg below knee	327
Both legs at ankle	3
One leg at ankle	131
Both feet	1
One foot	20
Part of both feet	3
Part of one foot	280
Thigh and leg at knee	2
Thigh and leg below knee	4
Leg at thigh and leg below knee	1
Leg at knee and part of foot	2
Leg below knee and foot	2
Leg below knee and part of foot	3
Total	2,032
Upper and lower extremities:	
Arm above elbow and one thigh	3
Arm above elbow and leg below knee	1
Arm above elbow and one foot	1
Arm above elbow and part of one foot	1
Arm below elbow and one thigh	2
Arm below elbow and leg below knee	4
One hip and part of hand	1
Leg at thigh and part of hand	8
Leg at knee and part of hand	1
Leg below knee and part of hand	3
Total	25
Grand total	4,403

Injuries.	Number.
Injuries to eyes.	
Loss of both eyes	14
Loss of one eye	447
Loss of sight of both eyes	30
Loss of sight of one eye	170
Amaurosis	4
Amblyopia	37
Cataract, traumatic	27
Loss of eye and loss of sight of eye	13
Loss of eye and amblyopia	5
Loss of eye and cataract, traumatic	3
Loss of sight of one eye and amblyopia	1
Loss of sight of one eye and cataract, traumatic	2
Total	754
Ankylosis of joints.	
Ankylosis:	
Bony, of—	
One hip	15
Both knees	4
One knee	104
Both ankles	1
One ankle	69
One shoulder	52
One elbow	101
One wrist	37
Spine	64
One knee and one ankle	1
Total	448
Fibrous, of—	
One hip	83
Both knees	1
One knee	407
Both ankles	5
One ankle	272
One shoulder	237
Both elbows	1
One elbow	352
Both wrists	1
One wrist	177
Foot, joints of	218
Hand, joints of	712
Hip and knee	2
Hip and hand	2
Knee and shoulder	3
Knee and wrist	1
Knee and hand	4
Knee and ankle	9
Ankle and shoulder	3
Ankle and foot	1
Ankle and hand	2

TABLE 37.—*Summary: Loss of extremities, loss of eyesight, ang ankylosis of joints—Final result, battle injuries, American Expeditionary Forces, 1917 and 1918.*—Con.

Injuries.	Number.
Ankylosis—Continued:	
Fibrous of—Continued—	
Foot and wrist	2
Shoulder and elbow	9
Shoulder and wrist	1
Shoulder and hand	1
Elbow and wrist	5
Elbow and hand	3
Wrist and hand	5
Total	2,519
Partial, and deformities of—	
One hip	92
Both knees	13
One knee	478
Both ankles	5
One ankle	363
Both shoulders	1
One shoulder	330
Both elbows	2
One elbow	407
Both wrists	1
One wrist	207
Hip and knee	2
Hip and ankle	3
Knee and ankle	3
Knee and shoulder	1
Knee and elbow	1
Knee and wrist	1
Ankle and elbow	1
Ankle and wrist	2
Shoulder and elbow	4
Shoulder and wrist	1
Elbow and wrist	7
Total	1,925

Injuries.	Number.
Ankylosis—Continued:	
Bony and fibrous—	
Knee and knee	1
Knee and foot	1
Shoulder and knee	1
Shoulder and hand	1
Elbow and ankle	2
Wrist and shoulder	1
Wrist and hand	1
Total	8
Bony, and partial deformities of—	
Knee and ankle	1
Ankle and shoulder	1
Elbow and wrist	1
Wrist and shoulder	1
Total	4
Fibrous and partial deformities of—	
Ankle and wrist	1
Foot and ankle	2
Foot and shoulder	1
Elbow and hip	1
Elbow and knee	1
Wrist and shoulder	1
Hand and knee	3
Hand and ankle	2
Hand and shoulder	5
Hand and elbow	6
Hand and wrist	20
Total	43
Sacro-iliac	10
Tempo-maxillary	12
Tempo-maxillary and fibrous of wrist	1
Grand total	4,970

Table 38 shows the individual final results in 19,768 soldiers.

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries, American Expeditionary Forces, 1917 and 1918.*

Injuries.	Number.
Amaurosis	3
and paralysis of facial nerve	1
Amblyopia	28
and adherent scar	1
and disfigurement, facial	1
and loss of eye	1
Aneurism, abdominal	1
Aneurism, aorta thoracic	4
Aneurism, arm (location not given)	
and fracture, faulty union	1
Aneurism, arteriovenous	5
Aneurism, artery, axillary	1
Aneurism, artery, carotid	1
Aneurism, artery, femoral	3
Aneurism, leg, right	1
Aneurism, thigh (location not given)	1
Aneurism, unclassified	1
Ankylosis, bony, ankle, right	20
and fracture, faulty union	1
and loss of leg at thigh	1
Ankylosis, bony, ankle, left	40
and ankylosis partial and deformity, shoulder	1

Injuries.	Number.
Ankylosis and adherent scar	2
and fracture, faulty union	1
Ankylosis, bony, ankle joints, both	1
Ankylosis, bony, elbow joint, right	40
and ankylosis, fibrous, ankle	1
and ankylosis, partial and deformity, wrist	1
and adherent scar	1
Ankylosis, bony, elbow joint, left	38
and ankylosis, fibrous, ankle	1
Ankylosis, bony, hip joint, right	5
Ankylosis, bony, hip joint, left	5
Ankylosis, bony, knee joint, right	40
and ankylosis, bony, ankle	1
Ankylosis, bony, knee joint, left	49
and amaurosis	1
Ankylosis, bony, knee joints, both	4
Ankylosis, bony, shoulder joint, right	25
and ankylosis, fibrous, knee	1
Ankylosis, bony, shoulder joint, left	16
and adherent scar	1
Ankylosis, bony, spine	59
and adherent scar	3

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries, American Expeditionary Forces, 1917 and 1918*—Continued.

Injuries.	Number.
Ankylosis and fracture, faulty union	1
and loss of leg at knee	1
and neuritis, following injury	1
Ankylosis, bony, wrist, right	11
and ankylosis, partial and deformity, shoulder	1
and adherent scar	1
Ankylosis, bony, wrist, left	17
Ankylosis, fibrous, ankle, right	90
and ankylosis, fibrous, shoulder	1
and adherent scar	4
Ankylosis, fibrous, ankle, left	126
and ankylosis, fibrous, shoulder	1
and arthritis, chronic, ankle	1
and adherent scar	5
and fracture, faulty union	1
Ankylosis, fibrous, ankle, both	3
and adherent scar	1
and fracture, faulty union	1
Ankylosis, fibrous, elbow, right	119
and amblyopia	1
and ankylosis, fibrous, shoulder	1
and ankylosis, fibrous, wrist	3
and adherent scar	5
and fracture, faulty union	3
and paralysis of limb	1
Ankylosis, fibrous, elbow, left	120
and ankylosis, fibrous, elbow	1
and ankylosis, fibrous, shoulder	1
and ankylosis, fibrous, wrist	1
and adherent scar	6
and fracture, faulty union	1
Ankylosis, fibrous, foot, one or more joints (not ankle)	205
and ankylosis, bony, knee	1
and ankylosis, fibrous, ankle	1
and ankylosis, fibrous, wrist	2
and ankylosis, partial and deformity, ankle	2
and ankylosis, partial and deformity, shoulder	1
and arthritis, chronic, ankle	1
and adherent scar	6
and flail joint, ankle	1
and fracture, faulty union	3
and loss of sight, one eye	1
and tendon, severed and contracted	1
Ankylosis, fibrous, hand or finger, one or more joints	652
and ankylosis, bony, wrist	1
and ankylosis, bony, shoulder	1
and ankylosis, fibrous, ankle	2
and ankylosis, fibrous, elbow	3
and ankylosis, fibrous, hip	2
and ankylosis, fibrous, knee	4
and ankylosis, fibrous, shoulder	1
and ankylosis, fibrous, wrist	5
and ankylosis, partial and deformities, ankle	2
and ankylosis, partial and deformities, elbow	6
and ankylosis, partial and deformities, knee	3
and ankylosis, partial and deformities, shoulder	5
and ankylosis, partial and deformities, wrist	20
and adherent scar	35
and disfigurement, facial	2
and fracture, faulty union	11
and fracture, nonunion	1
and loss of leg at thigh	1
and loss of sight, one eye	3
and paralysis of facial nerve	1
and paralysis of limb	3
and tendon, severed and contracted	2
and loss of leg below knee	1
Ankylosis, fibrous, hip, right	29
and ankylosis, fibrous, knee	1
Ankylosis, fibrous, hip joint, left	31
and ankylosis, fibrous, knee	1
and adherent scar	2
and fracture, faulty union	1
Ankylosis, fibrous, knee, right	169
and ankylosis, fibrous, ankle	5
and ankylosis, fibrous, shoulder	1
and adherent scar	9
and fracture, faulty union	1
Ankylosis, fibrous, knee joint, left	135
and ankylosis, bony, knee	1
and ankylosis, fibrous, ankle	4
and adherent scar	7
and fracture, faulty union	2
Ankylosis, fibrous, knee joints, both	1
Ankylosis, fibrous, shoulder, left	89
and ankylosis, fibrous, elbow	4
and ankylosis, fibrous, knee	1
and ankylosis, fibrous, wrist	1
and adherent scar	5
and facial disfigurement	2
Ankylosis, fibrous, shoulder joint, right	88
and ankylosis, bony, wrist	1
and ankylosis, fibrous, ankle	1
and ankylosis, fibrous, elbow	3
and ankylosis, fibrous, knee	1
and adherent scar	3
and fracture, faulty union	2
Ankylosis, fibrous, shoulder, both	1
Ankylosis, fibrous, wrist, right	58
and ankylosis, fibrous, elbow	1
and adherent scar	3
Ankylosis, fibrous, wrist, left	68
and ankylosis, fibrous, knee	1
and adherent scar	3
and fracture, faulty union	2
Ankylosis, fibrous, wrist, both	1
Ankylosis, partial and deformities, ankle, right	137
and ankylosis, bony, knee	1
and ankylosis, partial and deformities, knee	1
and ankylosis, partial and deformities, wrist	1
and adherent scar	3
and tendon, adherent in scars	1
Ankylosis, partial and deformities, ankle, left	159
and ankylosis, partial and deformities, wrist	1
and arthritis, chronic, knee	1
and adherent scar	10
and fracture, faulty union	1
and hernia	1
Ankylosis, partial and deformities, ankle joints, both	5
Ankylosis, partial and deformities, elbow joint, right	161
and ankylosis, partial and deformities, knee	1
and ankylosis, partial and deformities, shoulder	1
and ankylosis, partial and deformities, wrist	5
and adherent scar	3
Ankylosis, partial and deformities, elbow joint, left	162
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, wrist	1
and arthritis, chronic, shoulder	1
and adherent scar	7
and fracture, faulty union	1
and loss of leg at knee	1
and paralysis of facial nerve	1
and paralysis of limb, lower, from cord injuries	1

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries, American Expeditionary Forces, 1917 and 1918*—Continued.

Injuries.	Number.
Ankylosis, partial and deformities, elbow joints, both	2
Ankylosis, partial and deformities, hip joint, right	33
Ankylosis, partial and deformities, hip joint, left	36
and ankylosis, fibrous, elbow	1
and adherent scar	1
Ankylosis, partial and deformities, knee joint, right	212
and ankylosis, fibrous, elbow	1
and ankylosis, partial and deformities, ankle	3
and ankylosis, partial and deformities, hip	1
and ankylosis, partial and deformities, wrist	1
and adherent scar	7
and fracture, faulty union	1
Ankylosis, partial and deformities, knee joint, left	206
and ankylosis, partial and deformities, ankle	2
and ankylosis, partial and deformities, hip	1
and adherent scar	1
and fracture, faulty union	1
Ankylosis, partial and deformities, knee joints, both	13
Ankylosis, partial and deformities, shoulder joint, right	133
and ankylosis, fibrous wrist	1
and ankylosis, partial and deformities, elbow	1
and adherent scar	4
and tendon, adherent in scars	1
Ankylosis, partial and deformities, shoulder joint, left	138
and ankylosis, partial and deformities, elbow	2
and ankylosis, partial and deformities, knee	1
and adherent scar	5
Ankylosis, partial and deformities, shoulder joints, both	1
Ankylosis, partial and deformities, wrist joint, right	71
and ankylosis, fibrous, ankle	1
and ankylosis, partial and deformities, elbow	1
and ankylosis, partial and deformities, shoulder	1
and adherent scar	1
and fracture, faulty union	1
and tendon adherent in scars	1
Ankylosis, partial and deformities, wrist joint, left	97
and ankylosis, partial and deformities, wrist	1
and adherent scar	4
and aphasia	4
Ankylosis, sacro-iliac joint	9
and loss of sight, one eye	1
Ankylosis, tempore-maxillary joint	8
and amblyopia	1
and ankylosis, fibrous, wrist	1
and adherent scar	1
and facial disfigurement	1
and loss of eye	1
Arthritis, chronic, ankle, right	11
and ankylosis, partial and deformities, ankle	1
Arthritis, chronic, ankle, left	9
Arthrits, chronic, elbow, right	5
Arthritis, chronic, elbow, left	1
and ankylosis, partial and deformities, elbow	1
Arthritis, chronic, hip, right	3
Arthritis, chronic, hip, left	2

Injuries.	Number.
Arthritis, chronic, knee, right	20
and adherent scars	1
Arthritis, chronic, knee, left	14
and ankylosis, bony, wrist	1
Arthritis, chronic, knees, both	2
Arthritis, chronic, shoulder, right	3
Arthritis, chronic, shoulder, left	2
Arthritis, chronic, spine	3
Arthritis, chronic, wrist, right	3
Arthritis, chronic, wrist, left	4
Arthritis, chronic, wrists, both	1
Asthma	9
Atrophy of muscle, lower extremity	88
and ankylosis, bony, knee	1
and ankylosis, fibrous, ankle	2
and ankylosis, fibrous, knee	1
and ankylosis, partial and deformities, ankle	7
and ankylosis, partial and deformities, hip	2
and ankylosis, partial and deformities, knee	4
and adherent scar	10
and fracture, faulty union	2
and neuritis following injury	1
and paralysis of limb	2
Atrophy of muscle, upper extremity	103
and ankylosis, bony, elbow	1
and ankylosis, fibrous, elbow	4
and ankylosis, fibrous, shoulder	2
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, elbow	3
and ankylosis, partial and deformities, knee	1
and ankylosis, partial and deformities, shoulder	7
and ankylosis, partial and deformities, wrist	1
and adherent scar	5
and fracture, faulty union	1
and loss of hearing, one side	1
and loss of leg below knee	1
and paralysis of facial nerve	1
and paralysis of limb	4
and pleurisy, chronic	1
Bronchitis, chronic	2,281
and amblyopia	4
and ankylosis, fibrous, elbow	1
and ankylosis, fibrous, knee	1
and ankylosis, partial and deformities, elbow	1
and ankylosis, partial and deformities, knee	1
and ankylosis, partial and deformities, shoulder	1
and asthma	5
and adherent scar	5
and fracture, faulty union	1
and loss of hearing, one side	2
and loss of sight, one eye	1
and neuritis following injury	1
and paralysis of facial nerve	1
and tendon severed and contracted	1
Bulbar palsy	1
Cardiac arryhthmia, others	3
Cardiac dilitation	4
Cardiac disorders, functional	100
and adherent scar	1
and synovitis, chronic	1
Cardiac hypertrophy	4
Cardiac hypertrophy and dilitation	3
Cataract, traumatic	22
and adherent scar	2
and facial disfigurement	2
and loss of arm above elbow	1
and loss of arm below elbow	1
and loss of sight, one eye	2

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries. American Expeditionary Forces, 1917 and 1918*—Continued.

Injuries.	Number.
Cataract and loss of eye	3
Chest, deformities of, from injury	7
Conjunctivitis, chronic	24
and amblyopia	1
Contracture, arm, right	3
Contracture, arm, left	4
and fracture, faulty union	1
Contracture, leg, right	6
and ankylosis, partial and deformities, knee	1
Contracture, leg, left	9
and ankylosis, fibrous, knee	1
and ankylosis, partial and deformities, ankle	1
and adherent scar	1
Contracture, legs, both	2
Convalescent from wounds	554
and ankylosis, partial and deformities, ankle	2
and ankylosis, partial and deformities, elbow	3
and ankylosis, partial and deformities, knee	1
and ankylosis, partial and deformities, shoulder	2
and ankylosis, partial and deformities, wrist	2
and adherent scar	6
and fracture, faulty union	3
and fracture, nonunion	1
and loss of sight, one eye	1
and tendon, severed and contracted	1
Deformities, larynx	
and ankylosis, partial and deformities, shoulder	1
Disfigurement, facial	43
and amblyopia	1
and ankylosis, partial and deformities, knee	1
and adherent scar	6
Disfigurement, head	3
Epilepsy	5
Epilepsy, Jacksonian	1
False joint of femur, right side	1
False joint of fibula, right side	1
False joint of fibula and tibia, right side	1
Fistula, biliary	1
Fistula, fecal	6
and ankylosis, fibrous, hip	1
Fistula, other	3
and amblyopia	1
and rectum, loss of control of sphincter	1
Fistula, rectovesical	1
Fistula, retro-ureteral	1
Flail joint, ankle joint, right	1
Flail joint, ankle joint, left	1
Flail joint, elbow joint, right	3
Flail joint, elbow joint, left	5
Flail joint, elbow joint, both	1
Flail joint, hip joint, left	1
Flail joint, knee joint, right	2
Flail joint, knee joint, left	2
Flail joint, shoulder joint, right	6
Flail joint, shoulder joint, left	2
and fracture, faulty union	1
Flail joint, wrist joints, both	1
Flat foot, traumatic, right	3
Flat foot, traumatic, left	2
and fracture, faulty union	1
Flat foot, traumatic, both	2
Fractures, deforming	548
and ankylosis, bony, ankle	1
and ankylosis, bony, hip	1
and ankylosis, fibrous, ankle	3
and ankylosis, fibrous, elbow	2
and ankylosis, fibrous, hip	2
and ankylosis, fibrous, knee	5
and ankylosis, fibrous, wrist	2
and ankylosis, partial and deformities, ankle	6
Fractures and ankylosis, partial and deformities, elbow	13
and ankylosis, partial and deformities, hip	3
and ankylosis, partial and deformities, knee	9
and ankylosis, partail and deformities, shoulder	3
and ankylosis, partial and deformities, wrist	4
and adherent scar	18
and facial disfigurement	2
and fracture, faulty union	1
and loss of hearing, one side	1
and nerves severed and contracted	1
and paralysis of limb	1
and synovitis, chronic	1
Fracture, faulty union	292
and amblyopia	1
and ankylosis, bony, knee	2
and ankylosis, fibrous, ankle	5
and ankylosis, fibrous, elbow	4
and ankylosis, fibrous, hip	1
and ankylosis, fibrous, knee	16
and ankylosis, fibrous, wrist	1
and ankylosis, partial and deformities, ankle	2
and ankylosis, partial and deformities, hip	1
and ankylosis, partial and deformities, knee	2
and ankylosis, partial and deformities, shoulder	1
and arthritis, chronic, ankle	1
and adherent scar	13
and facial disfigurement	2
and loss of hearing, one side	1
and paralysis of limb	1
Fractures, old, ununited	34
and ankylosis, fibrous, knee	1
and ankylosis, partial and deformities, elbow	1
and ankylosis, partial and deformities, hip	1
and ankylosis, partial and deformities, shoulder	1
and ankylosis, partial and deformities, wrist	3
and adherent scar	2
Glaucoma, secondary	1
Heel, painful	2
Hemiplegia	39
and adherent scar	1
and paralysis of facial nerve	1
and loss of eye	1
Hernia, cerebral	2
and amblyopia	1
Hernia of muscle	10
and ankylosis, fibrous, elbow	1
and ankylosis, partial and deformities, elbow	1
and adherent scar	2
and paralysis of limb	1
Hernia, ventral	15
and ankylosis, fibrous, shoulder	1
and adherent scar	2
and loss of sight, one eye	1
and loss of eye	1
Insanity, total	2
Intestines, adhesions of	26
Intestines, fistula of	1
Intestines, obstruction	2
Intestines, partial loss of	2
Kidney, loss of one sequelae	4
and ankylosis, fibrous, wrist	1
and adherent scar	1
Laryngitis, chronic	42
and amblyopia	1
and adherent scar	1
Leucoma	18

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries, American Expeditionary Forces, 1917 and 1918*—Continued.

Injuries.	Number.
Leucoma and adherent scar	2
and loss of eye	1
Ligament, relaxation of	16
Loss of arm, right	102
and ankylosis, partial and deformities, shoulder	1
and adherent scar	1
Loss of arm, left	106
and ankylosis, partial and deformities, ankle	2
and ankylosis, partial, and deformities, knee	1
and ankylosis, partial and deformities, shoulder	1
and loss of hearing, one side	1
Loss of arm above elbow, right	153
and loss of eye	1
Loss of arm above elbow, left	168
and ankylosis, fibrous, knee	1
and ankylosis, partial and deformities, shoulder	1
and paralysis of facial nerve	1
Loss of arm at elbow, right	20
Loss of arm at elbow, left	20
and ankylosis, bony, knee	1
Loss of bone tissue	266
and amblyopia	2
and ankylos s, bony, elbow	3
and ankylosis, bony, hip	3
and ankylosis, bony, knee	4
and ankylosis, bony, shoulder	5
and ankylosis, bony, wrist	2
and ankylosis, fibrous, ankle	10
and ankylosis, fibrous, elbow	3
and ankylosis, fibrous, hip	4
and ankylosis, fibrous, knee	11
and ankylosis, fibrous, shoulder	13
and ankylosis, fibrous, wrist	4
and ankylosis, partial and deformities, ankle	8
and ankylosis, partial and deformities, elbow	10
and ankylosis, partial and deformities, hip	4
and ankylosis, partial and deformities, knee	6
and ankylosis, partial and deformities, shoulder	5
and ankylosis, partial and deformities, wrist	4
and arthritis, chronic, knee	1
and arthritis, chronic, wrist	1
and adherent scars	41
and contracture limb, lower	1
and facial disfigurement	11
and head disfigurement	3
and epilepsy	1
and fistula, fecal	2
and fistula, urinary	1
and flail joint, elbow	2
and flail joint, shoulder	3
and fracture, union	19
and fracture, faulty nonunion	6
and neuritis, following injury	1
and optic atrophy	2
and paralysis of facial nerve	3
and paralysis of limb	4
and pleurisy, chronic	1
and tendon adherent in scars	1
and tendon severed and contracted	2
and loss of eye	1
and loss of leg below knee	2
Loss of forearm above wrist, right	79
and ankylosis, bony, elbow	1
and epilepsy, Jacksonian	1
and loss of arm above elbow	1
and loss of hand	1
and loss of leg below knee	2
Loss of forearm above wrist, left	131
and ankylosis, fibrous, knee	1
and adherent scar	2
and loss of eye	1
Loss of forearm and loss of hand	1
and loss of leg below knee	1
Loss of forearms above wrist, both	3
Loss of ear, right	1
and loss of hearing, one side	1
Loss of ear, left	6
Loss of eye, right	200
and amblyopia	3
and ankylosis, bony, elbow	1
and ankylosis, fibrous, knee	1
and ankylosis, fibrous, shoulder	1
and adherent scar	4
and facial disfigurement	7
and loss of arm above elbow	1
and loss of sight, one eye	3
and optic atrophy	1
Loss of eye, left	199
and amblyopia	2
and ankylosis, fibrous, ankle	2
and ankylosis, fibrous, knee	2
and ankylosis, partial and deformities, knee	1
and adherent scar	2
and facial disfigurement	6
and loss of hearing, one side	1
and loss of sight, one eye	7
and paralysis of facial nerve	1
Loss of eyes, both	14
Loss of foot, right	12
and loss of arm, above elbow	1
Loss of foot, left	8
Loss of feet, both	1
Loss of foot, part of right	127
and ankylosis, fibrous, hip	2
and ankylosis, fibrous, knee	2
and ankylosis, fibrous, wrist	2
and ankylosis, partial and deformities, ankle	3
and ankylosis, partial and deformities, knee	1
and adherent scar	1
and loss of hearing, one side	1
and loss of leg below knee	1
and paralysis of facial nerve	1
and paralysis of limb	1
Loss of foot, part of, left	129
and ankylosis, fibrous, ankle	2
and ankylosis, fibrous, knee	1
and adherent scar	1
and fracture, faulty union	2
and loss of arm above elbow	1
and loss of eye	1
and loss of hearing, one side	1
and loss of leg, below knee	2
and loss of leg at knee	2
and optic atrophy	1
and paralysis of limb	1
Loss of feet, part of both	3
Loss of hand, all, right	6
Loss of hand, all, left	10
and adherent scar	1
and loss of sight, both eyes	1
Loss of hand, all, both	1
Loss of hand at wrist, right	10
and ankylosis, partial and deformities, elbow	1
Loss of hand at wrist, left	14
and adherent scar	1
Loss of hand, part of right	563
and ankylosis, bony, shoulder	1
and ankylosis, bony, wrist	1
and ankylosis, fibrous, knee	2
and ankylosis, fibrous, shoulder	3
and ankylosis, fibrous, wrist	2
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, elbow	1
and ankylosis, partial and deformities, knee	1
and ankylosis, partial and deformities, wrist	1

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries, American Expeditionary Forces 1917 and 1918*—Continued.

Injuries.	Number.
Loss of hand and adherent scar	7
and facial disfigurement	2
and fracture, faulty union	3
and loss of arm above elbow	3
and loss of arm below elbow	1
and loss of eye	1
and loss of hand, side not specified	2
and loss of leg below knee	2
and loss of leg at hip	1
and loss of leg at knee	1
and loss of leg at thigh	5
and loss of sight, one eye	3
and paralysis of limb	4
and paralysis of limb, upper, from cord injuries	1
and tendon, adherent, in scars	3
Loss of hand, part of, left	836
and ankylosis, bony, shoulder	1
and ankylosis, fibrous, elbow	1
and ankylosis, fibrous, hip	1
and ankylosis, fibrous, knee	2
and ankylosis, fibrous, wrist	2
and ankylosis, partial and deformities, elbow	3
and ankylosis, partial and deformities, hip	1
and ankylosis, partial and deformities, wrist	3
and adherent scar	12
and fistula, urinary	1
and fracture, faulty union	5
and fracture, nonunion	1
and loss of arm above elbow	1
and loss of ear	1
and loss of eye	3
and loss of hearing, one side	1
and loss of leg below knee	1
and loss of leg at thigh	3
and paralysis of limb	3
and pleurisy, chronic	1
and tendon, adherent, in scars	2
Loss of hand, part of both	4
Loss of hearing, right ear	74
and adherent scar	1
and paralysis of facial nerve	5
Loss of hearing, left ear	77
and facial disfigurement	1
and loss of sight, one eye	1
and optic atrophy	1
and paralysis of facial nerve	1
Loss of hearing, both ears	29
Loss of hearing, partial	101
and amblyopia	1
and aphasia	1
and adherent scar	4
and loss of arm above elbow	2
and loss of sight, one eye	1
and paralysis of facial nerve	2
Loss of leg, right	14
and adherent scar	1
Loss of leg, left	22
and adherent scar	1
Loss of legs, both	2
Loss of leg at ankle, right	41
and adherent scar	5
Loss of leg at ankle, left	81
and ankylosis, bony, ankle	1
and ankylosis, bony, knee	1
and adherent scar	1
and loss of eye	1
Loss of legs at ankle, both	3
Loss of leg at knee, right	31
and ankylosis, fibrous, knee	1
and adherent scar	1
and fracture, faulty union	1
Loss of leg at knee, left	50
and ankylosis, fibrous, wrist	1
and adherent scar	1
and facial disfigurement	1
and loss of arm below elbow	1
Loss of leg at knees, both	1
Loss of leg, middle third, right	154
and ankylosis, fibrous, elbow	1
and ankylosis, fibrous, hip	1
and adherent scar	3
and loss of arm above elbow	1
and loss of arm below elbow	1
and loss of eye	1
and loss of leg at thigh	1
Loss of leg, middle third, left	157
and ankylosis, partial and deformities, knee	1
and adherent scar	4
and loss of foot	2
and paralysis of limb	1
Loss of legs, middle third, both	9
Loss of muscle	404
and amblyopia	2
and ankylosis, bony, hip	1
and ankylosis, bony, knee	1
and ankylosis, shoulder	1
and ankylosis, fibrous, ankle	2
and ankylosis, fibrous, elbow	11
and ankylosis, fibrous, knee	8
and ankylosis, fibrous, shoulder	13
and ankylosis, fibrous, wrist	1
and ankylosis, partial and deformities, ankle	6
and ankylosis, partial and deformities, elbow	4
and ankylosis, partial and deformities, hip	4
and ankylosis, partial and deformities, knee	7
and ankylosis, partial and deformities, shoulder	9
and adherent scar	86
and facial disfigurement	1
and fracture, faulty union	3
and glaucoma	2
and loss of arm above elbow	1
and loss of hearing, one side	1
and loss of leg below knee	1
and loss of leg at knee	2
and loss of leg at thigh	1
and loss of sight, one eye	1
and paralysis of limb	1
and pleurisy, chronic	1
and synovitis, chronic	1
and tendon, adherent in scar	1
Loss of ribs, part	2
Loss of scapula, right side	1
Loss of sight, right eye	89
and amblyopia	1
and ankylosis, fibrous, shoulder	1
and adherent scar	1
and facial disfigurement	3
and head disfigurement	1
and leucoma adherens	1
and loss of eye	2
and loss of hearing, one side	1
and optic atrophy	1
Loss of sight, left eye	71
and ankylosis, partial and deformities, elbow	1
and ankylosis, partial and deformities, hip	1
and adherent scar	2
and loss of eye	1
Loss of sight of both eyes	31
and ankylosis, partial and deformities, wrist	1
and facial disfigurement	1
Loss of teeth	74
and ankylosis, bony, elbow	1
and ankylosis, fibrous, hip	1
and adherent scar	15
and facial disfigurement	30
and fracture, nonunion	1
and loss of eye	1
and loss of hearing, one side	1

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries, American Expeditionary Forces, 1917 and 1918*—Continued.

Injuries.	Number.
Loss of teeth, and loss of sight, one eye	1
Loss of testicle	32
and ankylosis, fibrous, knee	1
and ankylosis, partial and deformities, knee	1
and adherent scar	6
and facial disfigurement	1
and loss of eye	2
and loss of leg at thigh	2
and paralysis of limb	2
and tendon adherent in scars	1
Loss of thigh, upper third, right	122
and ankylosis, fibrous, ankle	1
and ankylosis, fibrous, shoulder	1
and ankylosis, partial and deformities, wrist	1
and adherent scar	3
and loss of arm above elbow	1
and loss of arm below elbow	2
Loss of thigh, upper third, left	95
and ankylosis, bony, elbow	1
and ankylosis, fibrous, elbow	1
and adherent scar	5
and fracture, faulty union	1
Loss of thighs, upper third, both	1
Loss of thigh, middle third, right	245
and ankylosis, fibrous, ankle	1
and adherent scar	3
and loss of leg below knee	2
and loss of leg at knee	2
Loss of thigh, middle third, left	245
and ankylosis, fibrous, hip	1
and ankylosis, partial and deformities, wrist	1
and arthritis, chronic, knee	1
and adherent scar	2
and flail joint, wrist	1
and fracture, faulty union	3
Loss of thighs, middle third, both	7
Loss of thigh, lower third, right	193
and amblyopia	1
and ankylosis, bony, knee	1
and ankylosis, fibrous, elbow	1
and ankylosis, fibrous, shoulder	1
and adherent scar	2
and loss of leg below knee	1
pleurisy, chronic	1
Loss of thigh, lower third, left	202
and amblyopia	1
and ankylosis, bony, knee	1
and ankylosis, fibrous, wrist	1
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, elbow	1
and adherent scar	3
and fracture, faulty union	1
and loss of arm above elbow	2
and loss of leg below knee	1
Loss of thighs, lower third, both	3
Lung, foreign bodies in	9
and ankylosis, partial and deformities, shoulder	1
and fracture, faulty union	1
Monoplegia	4
Nerve complication	646
and amblyopia	3
and aneurism	1
and ankylosis, bony, elbow	7
and ankylosis, bony, knee	2
and ankylosis, bony, wrist	2
and ankylosis, fibrous, ankle	9
and ankylosis, fibrous, elbow	37
and ankylosis, fibrous, hip	2
and ankylosis, fibrous, knee	10
and ankylosis, fibrous, shoulder	6
and ankylosis, fibrous, wrist	13
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, elbow	6
Nerve complication, and ankylosis, partial and deformities, hip	1
and ankylosis, partial and deformities, knee	2
and ankylosis, partial and deformities, shoulder	5
and ankylosis, partial and deformities, wrist	1
and aphasia	1
and adherent scar	53
and facial disfigurement	6
and fistula, urinary	1
and flail joint, elbow	1
and fracture, faulty union	16
and fracture, nonunion	3
and hernia	1
and loss of arm above elbow	2
and loss of eye	1
and loss of leg below knee	3
and loss of leg at knee	3
and loss of leg at thigh	1
and loss of sight, one eye	1
and tendon adherent in scars	1
and tendon severed and contracted	1
Nerves severed	3
Nerves severed and contracted	1
Neuritis following injury, arm, right	22
Neuritis following injury, arm, left	19
and ankylosis, fibrous, ankle	1
and ankylosis, fibrous, elbow	2
and adherent scar	1
and loss of eye	1
Neuritis following injury, arms, both	1
Neuritis following injury, forearm, right	1
and ankylosis, fibrous, wrist	1
Neuritis following injury, forearm, left	6
Neuritis following injury, leg, right	11
and ankylosis, fibrous, wrist	1
and tendon severed and contracted	1
Neuritis following injury, leg, left	12
and ankylosis, partial and deformities, ankle	1
Neuritis following injury, legs, both	1
Neuritis following injury, thigh, right	6
Neuritis following injury, thigh, left	1
Neuritis following injury, thigh, both	7
Optic atrophy	25
and ankylosis, partial and deformities, knee	1
and adherent scar	1
Osteomyelitis	224
and ankylosis, bony, elbow	1
and ankylosis, bony, shoulder	1
and ankylosis, fibrous, ankle	5
and ankylosis, fibrous, elbow	5
and ankylosis, fibrous, hip	2
and ankylosis, fibrous, knee	7
and ankylosis, fibrous, shoulder	2
and ankylosis, fibrous, wrist	3
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, knee	2
and ankylosis, partial and deformities, shoulder	1
and arthritis, chronic, ankle	1
and adherent scar	3
and facial disfigurement	1
and fistula, fecal	2
and fistula, urinary	1
and fracture, faulty union	9
and fracture, nonunion	3
and loss of arm above elbow	1
and loss of sight, one eye	1
and neuritis following injury	1
Paralysis, arm, right	187
and ankylosis, bony, ankle	1
and ankylosis, bony, shoulder	1
and ankylosis, fibrous, elbow	8
and ankylosis fibrous, knee	1
and ankylosis, fibrous, shoulder	1

TABLE 38.—*Associated final results, all causes (deaths excepted)—Battle injuries, American Expeditionary Forces, 1917 and 1918*—Continued.

Injuries.	Number.
Paralysis and ankylosis, fibrous, wrist	2
and ankylosis, partial and deformities, elbow	5
and ankylosis, partial and deformities, knee	1
and ankylosis, partial and deformities, wrist	2
and aphasia	1
and adherent scar	5
and fracture, nonunion	1
and hernia	1
and loss of sight, one eye	1
and paralysis, facial nerve	1
and paralysis of limb	2
Paralysis of arm, left	206
and ankylosis, bony, elbow	6
and ankylosis, bony, shoulder	1
and ankylosis, fibrous, elbow	12
and ankylosis, fibrous, wrist	3
and ankylosis, partial and deformities, elbow	1
and ankylosis, partial and deformities, shoulder	1
and ankylosis, partial and deformities, wrist	4
and adherent scar	7
and flail joint, elbow	1
and hernia	1
and paralysis of facial nerve	1
Paralysis of arms, both	2
Paralysis of arm from cord injuries, left	
and ankylosis, partial and deformities, elbow	1
Paralysis, facial nerve, right side	25
and adherent scar	1
and fracture, nonunion	1
Paralysis, facial nerve, left side	22
and fracture, faulty union	1
Paralysis, foot, right	16
and adherent scar	1
and loss of leg at thigh	1
Paralysis, foot, left	26
Paralysis, hearing (auditory nerve)	2
and paralysis of facial nerve	1
Paralysis, leg, right	121
and ankylosis, fibrous, ankle	1
and ankylosis, fibrous, knee	4
and adherent scar	2
and fracture, faulty union	2
and loss of leg at thigh	1
Paralysis, leg, left	128
and ankylosis, fibrous, elbow	1
and ankylosis, fibrous, wrist	1
and ankylosis, partial and deformities, knee	1
and adherent scar	2
and loss of eye	1
Paralysis, legs, both	3
Paralysis, leg, from cord injuries, right	2
Paralysis, leg, from cord injuries, left	3
Paralysis, legs, from cord injuries, both	5
Paralysis, rectum, from cord injuries	1
Paralysis, speech	20
and ankylosis, fibrous, shoulder	1
and loss of arm above elbow	1
Paralysis, taste (gustatory nerve)	1
Paraplegia	29
and paralysis of limb, upper, from cord injuries	1
Pleurisy and adherent pleura	260
and ankylosis, fibrous, knee	1
and ankylosis, fibrous, shoulder	1
and ankylosis, partial and deformities, elbow	2
and ankylosis, partial and deformities, shoulder	1
and adherent scar	13
and facial disfigurement	1
and fracture, faulty union	1
and hernia	2
Pleurisy and intestines, adhesion	1
and loss of eye	1
and loss of kidney, one	1
and loss of sight, one eye	1
and tendon adherent in scars	1
Rectum, loss of control of sphincter	6
Rectum, loss of portion	1
Scar adherent or painful	1,314
and ankylosis, bony, ankle	1
and ankylosis, fibrous, ankle	3
and ankylosis, fibrous, elbow	1
and ankylosis, fibrous, hip	2
and ankylosis, fibrous, knee	3
and ankylosis, fibrous, shoulder	1
and ankylosis, fibrous, wrist	1
and ankylosis, partial and deformities, ankle	3
and ankylosis, partial and deformities, elbow	6
and ankylosis, partial and deformities, hip	4
and ankylosis, partial and deformities, knee	3
and ankylosis, partial and deformities, shoulder	7
and ankylosis, partial and deformities, wrist	3
and facial disfigurement	2
and fracture, faulty union	3
and fracture, nonunion	1
and loss of eye	2
and loss of leg at hip	1
and loss of sight, one eye	1
and neuritis following injury	1
and synovitis, chronic	1
Spleen, infection	3
Stenosis, esophagus	1
Stenosis, rectum	3
and loss of arm above elbow	1
Stenosis, trachea	4
Swollen arm, left, from injured blood vessels	1
Swollen arms, both, from injured blood vessels	1
Swollen leg, right, from injured blood vessels	2
Swollen legs, both, from injured blood vessels	1
Synovitis, chronic, ankle, left	1
and ankylosis, partial and deformities, ankle	1
Synovitis, chronic, elbow, left	1
Synovitis, chronic, knee, right	22
Synovitis, chronic, knee, left	14
and ankylosis, partial and deformities, elbow	1
and adherent scar	1
and paralysis of limb, upper, from cord injuries	1
Synovitis, chronic, shoulder, right	2
Synovitis, chronic, shoulder, left	2
Synovitis, chronic, wrist, left	1
Tendon adherent in scars	22
and ankylosis, fibrous, ankle	1
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, knee	1
Tendon severed and contracted	65
and ankylosis, bony, wrist	1
and ankylosis, partial and deformities, ankle	1
and ankylosis, partial and deformities, wrist	1
and adherent scar	2
and paralysis of limb	1
Thrombophlebitis	3
Total	19,768

MILITARY AGENTS.

The final results of military agents, other than gas, was 19,140; of gas, 2,556; and of the total for all, 21,696. It will be noted that we are speaking of final results and not individual men.

Table 39 shows the final results of injuries (not men) other than such as occurred as a result of gassing.

Table 40 shows the final results (not men) that occurred as a result of gassing.

The number per 1,000 of the cases showing final result from the various missiles was as follows: The rifle, 18.30; shell, 22.04; shrapnel 15.44; hand grenade, 24.20; other gunshot missiles, 7.43. As was to be expected, the highest proportion of unfortunate final results occurred as a result of artillery missiles, with the exception of the hand grenade, where the number of cases was small. The total proportional number of final results for missiles other than gas was 12.47 and for gas 3.62. By far the largest proportion of the final results occurring as a result of gassing was chronic bronchitis, which alone accounted for 2,198 out of a total of 2,556.

TABLE 39.—*Final results of military agents, excluding gases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result.*

	Rifle.		Shell.		Shrapnel.		Hand grenade.		Other gunshot.		Others.		Total.	
Total admissions	20,420		17,439		33,787		880		75,125		5,886		153,537	
Results.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Ankle, right:														
Ankylosis, bony, of	3	0.01	5	0.03	8	0.02	....	.....	6	0.01	....	....	22	0.01
Ankylosis, fibrous, of	16	.08	13	.07	24	.07	....	.....	41	.05	....	....	94	.06
Ankylosis, partial and deformities, of	39	.19	23	.13	33	.10	1	0.11	42	.06	1	0.10	144	.09
Arthritis, chronic, of	1	.00	1	.01	6	.02	....	.....	3	.00	1	.02	12	.01
Flail joint of	....	.....	....	.....	....	.....	....	.....	1	.00	....	....	1	.00
Ankle, left:														
Ankylosis, bony, of	11	.05	11	.06	10	.03	....	.....	12	.02	....	....	44	.03
Ankylosis, fibrous, of	34	.17	16	.09	28	.08	1	.11	51	.07	4	.07	134	.09
Ankylosis, partial and deformities, of	48	.24	28	.16	46	.14	....	.....	49	.07	2	.03	173	.11
Arthritis, chronic, of	4	.02	2	.01	1	.00	....	.....	1	.00	1	.02	9	.01
Flail joint of	....	.....	....	.....	....	.....	....	.....	1	.00	....	....	1	.00
Synovitis, chronic, of	....	.....	....	.....	2	.01	....	.....	....	.....	....	....	2	.00
Ankles, both:														
Ankylosis, bony, of	....	.....	....	.....	1	.00	....	.....	....	.....	....	....	1	.00
Ankylosis, fibrous, of	1	.00	....	.....	2	.01	....	.....	2	.00	....	....	5	.00
Ankylosis, partial and deformities, of	2	.01	3	.02	....	.....	....	.....	....	.....	....	....	5	.00
Arthritis, chronic, of	....	.....	....	.....	....	.....	....	.....	....	.....	....	....	....	.....
Ankle, s. n. s.:														
Ankylosis, bony, of	3	.01	....	.....	2	.01	....	.....	....	.....	....	....	5	.00
Ankylosis, fibrous, of	11	.05	5	.03	9	.03	1	.11	35	.05	1	.02	62	.04
Ankylosis, partial and deformities, of	11	.05	12	.07	26	.08	1	.11	10	.01	....	....	60	.04
Arthritis, chronic, of	1	.00	1	.01	....	.....	....	.....	2	.00	....	....	4	.00
Arm, right:														
Contracture of	1	.00	....	.....	....	.....	....	.....	2	.00	....	....	3	.00
Loss of, upper third	11	.05	33	.19	38	.11	1	.11	18	.02	3	.05	104	.07
Loss of, above elbow	21	.10	78	.45	37	.11	3	.34	14	.02	1	.02	154	.10
Loss of, at elbow	3	.01	7	.04	8	.02	....	.....	2	.00	....	....	20	.01
Neuritis, following injury	2	.01	1	.01	1	.00	1	.11	17	.02	....	....	22	.01
Paralysis of	52	.25	38	.22	57	.17	1	.11	71	.09	2	.03	221	.15
Paralysis of, from cord injuries	....	.....	....	.....	....	.....	....	.....	....	.....	....	....	....	.....

TABLE 39.—*Final results of military agents, excluding gases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result*—Continued.

Results.	Rifle.		Shell.		Shrapnel.		Hand grenade.		Other gunshot.		Others.		Total.	
Total admissions	20,420		17,439		33,787		880		75,125		5,886		153,537	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Arm, left:														
Contracture of	1	0.00			3	0.01			1	0.00			5	0.00
Loss of, upper third	12	.06	43	0.25	37	.11	1	0.11	16	.02	2	0.03	111	.07
Loss of, above elbow	31	.15	57	.33	55	.16			25	.03	3	.05	171	.11
Loss of, at elbow	3	.01	7	.04	7	.02	2	.23	1	.00	1	.02	21	.01
Neuritis, following injury	4	.02	3	.02	4	.01			12	.02	1	.02	24	.02
Paralysis of	73	.36	45	.26	52	.15			72	.10	1	.02	243	.16
Paralysis of, from cord injuries					1	.00							1	.00
Swollen from injured blood vessels					1	.00							1	.00
Arms, both:														
Contracture of														
Loss of, upper third														
Loss of, above elbow														
Loss of, at elbow														
Neuritis, following injury									1	.00			1	.00
Paralysis of									2	.00			2	.00
Paralysis of, from cord injuries			1	.01	2	.01							3	.00
Swollen from injured blood vessels					1	.00							1	.00
Arm, s. n. s.:														
Aneurism of (location not given)									1	.00			1	.00
Loss of, above elbow	2	.01	10	.06	3	.01	2	.23	3	.00	1	.02	21	.01
Loss of, below elbow			3	.02	4	.01	1	.11	1	.00			9	.01
Ear, right:														
Loss of			1	.01	1	.00							2	.00
Loss of hearing of	4	.02	16	.09	6	.02			7	.01	46	.78	79	.05
Ear, left:														
Loss of			1	.01	4	.01			1	.00			6	.00
Loss of hearing of	1	.00	8	.05	10	.03			8	.01	50	.85	77	.05
Ears, both:														
Loss of														
Loss of hearing of					3	.01					26	.44	29	.02
Ear, s. n. s.:														
Loss of					1	.00							1	.00
Loss of hearing, one side	3	.01	3	.02	3	.01	2	.23			4	.07	15	.01
Paralysis, hearing (auditory nerve)	1	.00			1	.00			1	.00			3	.00
Partial loss of hearing	1	.00	17	.10	4	.01			3	.00	85	1.44	110	.07
Elbow, right:														
Ankylosis, bony, of	10	.05	4	.02	10	.03			17	.02	2	.03	43	.03
Ankylosis, fibrous, of	34	.17	17	.10	30	.09			52	.07			133	.09
Ankylosis, partial and deformities, of	39	.19	26	.15	47	.14	3	.34	57	.08	2	.03	174	.11
Arthritis, chronic, of	1	.00			2	.01			2	.00			5	.00
Flail joint of	2	.01							1	.00			3	.00
Elbow, left:														
Ankylosis, bony, of	4	.02	1	.01	18	.05	1	.11	14	.02	1	.02	39	.03
Ankylosis, fibrous, of	26	.13	14	.08	32	.09			54	.07	4	.07	130	.08
Ankylosis, partial and deformities, of	53	.26	31	.18	45	.13			42	.06	5	.08	176	.11
Arthritis, chronic, of			1	.01	1	.00							2	.00
Flail joint of	2	.01			2	.01			1	.00			5	.00
Synovitis, chronic, of									1	.00			1	.00
Elbows, both:														
Ankylosis, bony, of														
Ankylosis, fibrous, of														
Ankylosis, partial and deformities, of			2	.01									2	.00
Arthritis, chronic, of														
Elbow, s. n. s.:														
Ankylosis, bony, of	8	.04	2	.01	2	.01			10	.01			22	.01
Ankylosis, fibrous, of	19	.09	9	.05	17	.05			63	.08	2	.03	110	.07
Ankylosis, partial and deformities, of	20	.10	10	.06	32	.09	1	.11	12	.02	1	.02	76	.05
Flail joint of	1	.00			3	.01							4	.00

TABLE 39.—*Final results of military agents, excluding gases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result*—Continued.

Results.	Rifle.		Shell.		Shrapnel.		Hand grenade.		Other gunshot.		Others.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total admissions	20,420		17,439		33,787		880		75,125		5,886		153,537	
Eye, right:														
Loss of	13	0.06	40	0.23	89	0.26	6	0.68	64	0.09	6	0.10	218	0.14
Loss of sight of	10	.05	24	.14	17	.05	5	.57	23	.03	10	.17	89	.06
Eye, left:														
Loss of	19	.09	43	.25	72	.21	7	.80	77	.10	5	.08	223	.15
Loss of sight of	6	.03	14	.08	27	.08	.....	.....	17	.02	2	.03	66	.04
Eyes, both:														
Loss of	3	.01	6	.03	4	.01	1	.11	.....	.....	.....	.....	14	.01
Loss of sight of	1	.00	16	.09	6	.02	1	.11	4	.01	2	.03	30	.02
Eye, s. n. s.:														
Loss of	1	.00	12	.07	8	.02	.....	.....	7	.01	.....	.....	28	.02
Loss of sight, one eye	3	.01	9	.05	10	.03	.....	.....	8	.01	1	.02	31	.02
Amaurosis	.....	.....	.....	.....	3	.01	1	.11	.....	.....	.....	.....	4	.00
Amblyopia	4	.02	7	.04	12	.04	1	.11	16	.02	4	.07	44	.03
Cataract, traumatic	1	.00	15	.09	6	.02	4	.45	3	.00	3	.05	32	.02
Face:														
Disfigurement of	25	.12	28	.16	23	.07	.....	.....	60	.08	2	.03	138	.09
Paralysis of facial nerve (right side)	4	.02	5	.03	8	.02	.....	.....	9	.01	.....	.....	26	.02
Paralysis of facial nerve (left side)	2	.01	3	.02	9	.03	.....	.....	9	.01	.....	.....	23	.01
Paralysis of facial nerve (side not stated)	5	.02	6	.03	5	.01	.....	.....	6	.01	1	.02	23	.01
Femur, right, false joint of	.....	.....	.....	.....	.....	.....	.....	.....	1	.00	.....	.....	1	.00
Fibula, false joint of right side	.....	.....	.....	.....	.....	.....	.....	.....	1	.00	.....	.....	1	.00
Fibula and tibia, false joint of, right side	.....	.....	.....	.....	.....	.....	.....	.....	1	.00	.....	.....	1	.00
Foot, right:														
Flat foot, traumatic	.....	.....	1	.01	1	.00	.....	.....	1	.00	.....	.....	3	.00
Loss of	2	.01	5	.03	1	.00	1	.11	4	.01	.....	.....	13	.01
Loss of part of	25	.12	25	.14	40	.12	1	.11	49	.07	2	.03	142	.09
Paralysis of	4	.02	3	.02	4	.01	.....	.....	6	.01	1	.02	18	.01
Foot, left:														
Flat foot, traumatic	1	.00	.....	.....	1	.00	.....	.....	1	.00	.....	.....	3	.00
Loss of	1	.00	2	.01	3	.01	.....	.....	2	.00	.....	.....	8	.01
Loss of part of	25	.12	31	.18	32	.09	.....	.....	52	.07	4	.07	144	.09
Paralysis of	1	.00	3	.02	13	.04	.....	.....	9	.01	.....	.....	26	.02
Feet, both:														
Flat foot, traumatic	.....	.....	1	.01	.....	.....	.....	.....	1	.00	.....	.....	2	.00
Loss of	.....	.....	1	.01	.....	.....	.....	.....	.....	.....	.....	.....	1	.01
Loss of part of	.....	.....	1	.01	1	.00	.....	.....	1	.00	.....	.....	3	.00
Foot, s. n. s.:														
Ankylosis of one or more joints	59	.29	36	.21	67	.20	.....	.....	61	.08	2	.03	225	.15
Loss of	.....	.....	1	.01	1	.00	.....	.....	.....	.....	.....	.....	2	.00
Forearm, right:														
Loss of, above wrist	9	.04	37	.21	19	.06	14	1.59	5	.01	1	.02	85	.06
Neuritis, following injury	.....	.....	.....	.....	2	.01	.....	.....	.....	.....	.....	.....	2	.00
Forearm, left:														
Loss of, above wrist	14	.07	68	.39	26	.08	16	1.82	12	.02	1	.02	137	.09
Neuritis, following injury	.....	.....	.....	.....	1	.00	.....	.....	2	.00	1	.02	4	.00
Forearms, both, loss of, above wrist	.....	.....	1	.01	.....	.....	2	.23	.....	.....	.....	.....	3	.00
Hand, right:														
Loss of all	1	.00	2	.01	.....	.....	2	.23	1	.00	.....	.....	6	.00
Loss of at wrist	1	.00	3	.02	5	.01	2	.23	.....	.....	.....	.....	11	.01
Loss of part of	111	.54	93	.53	170	.50	7	.80	224	.30	9	.15	614	.40
Hand, left:														
Loss of all	.....	.....	3	.02	4	.01	3	.34	2	.00	.....	.....	12	.01
Loss of at wrist	1	.00	.....	.....	2	.01	7	.80	5	.01	.....	.....	15	.01
Loss of part of	182	.89	99	.57	226	.67	15	1.70	351	.47	12	.20	885	.58
Hands, both:														
Loss of all	.....	.....	1	.01	.....	.....	.....	.....	.....	.....	.....	.....	1	.00
Loss of at wrist	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Loss of part of	.....	.....	2	.01	1	.00	.....	.....	.....	.....	1	.02	4	.00

TABLE 39.—*Final results of military agents, excluding gases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result*—Continued.

Results.	Rifle.		Shell.		Shrapnel.		Hand grenade.		Other gunshot.		Others.		Total.	
Total admissions	20,420		17,439		33,787		880		75,125		5,886		153,537	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Hand, s. n. s.:														
Ankylosis of one or more joints	173	0.85	113	0.65	222	0.66	6	0.68	244	0.32	9	0.15	767	0.50
Loss of			2	.01			1	.11	1	.00			4	.00
Head, disfigurement of			2	.01	1	.00			3	.00	1	.02	7	.00
Hip, right:														
Ankylosis, bony, of	1	.00			3	.01			1	.00			5	.00
Ankylosis, fibrous, of	5	.02	2	.01	9	.03			14	.02			30	.02
Ankylosis, partial and deformities, of	13	.06	3	.02	6	.02			11	.01			33	.02
Arthritis, chronic, of			1	.01					1	.00	1	.02	3	.00
Hip, left:														
Ankylosis, bony, of			1	.01					4	.01			5	.00
Ankylosis, fibrous, of	9	.04	3	.02	9	.03			13	.02	1	.02	35	.02
Ankylosis, partial and deformities, of	10	.05	7	.04	13	.04	1	.11	5	.01	1	.02	38	.02
Arthritis, chronic, of	1	.00			1	.00							2	.00
Flail joint of			1	.01									1	.00
Hip, both:														
Ankylosis, bony, of														
Ankylosis, fibrous, of														
Ankylosis, partial and deformities, of														
Arthritis, chronic, of														
Hips, s. n. s.:														
Ankylosis, bony, of	2	.01							3	.00			5	.00
Ankylosis, fibrous, of	4	.02	1	.01	6	.02			10	.01	1	.02	22	.01
Ankylosis, partial and deformities, of	4	.02	2	.01	9	.03			9	.01			24	.02
Intestines:														
Adhesions of	11	.05	3	.02	7	.02			5	.01	1	.02	27	.02
Fistula of			1	.01									1	.00
Obstruction of					1	.00			1	.00			2	.00
Partial loss of			1	.01	1	.00							2	.00
Kidney, loss of one sequelæ			1	.01	2	.01			3	.00			6	.00
Knee, right:														
Ankylosis, bony, of	4	.02	9	.05	8	.02			20	.03			41	.03
Ankylosis, fibrous, of	50	.24	23	.13	44	.13	2	.23	63	.08	3	.05	185	.12
Ankylosis, partial and deformities, of	49	.24	38	.22	71	.21			61	.08	7	.12	226	.15
Arthritis, chronic, of	5	.02	7	.04	3	.01			5	.01	1	.02	21	.01
Flail joint of			1	.01					1	.00			2	.00
Synovitis of	4	.02	2	.01	6	.02			7	.01	2	.03	21	.01
Knee, left:														
Ankylosis, bony, of	12	.06	16	.09	10	.03	1	.11	11	.01			50	.03
Ankylosis, fibrous, of	30	.15	21	.12	40	.12			52	.07	6	.10	149	.10
Ankylosis, partial and deformities, of	48	.24	41	.24	63	.19	1	.11	55	.07	3	.05	211	.14
Arthritis, chronic, of	2	.01			4	.01			7	.01	2	.03	15	.01
Flail joint of	1	.00			1	.00							2	.00
Synovitis, chronic, of	2	.01	1	.01	6	.02	1	.11	6	.01	1	.02	17	.01
Knees, both:														
Ankylosis, bony, of	2	.01	2	.01									4	.00
Ankylosis, fibrous, of											1	.02	1	.00
Ankylosis, partial and deformities of	2	.01	1	.01	6	.02			4	.01			13	.01
Arthritis, chronic, of			1	.01	1	.00							2	.00
Knee, s. n. s.:														
Ankylosis, bony, of	5	.02	3	.02	6	.02			3	.00			17	.01
Ankylosis, fibrous, of	22	.11	8	.05	22	.07	1	.11	39	.05	2	.03	94	.06
Ankylosis, partial and deformities, of	6	.03	10	.06	31	.09	1	.11	7	.01	1	.02	56	.04
Arthritis, chronic, of			2	.01	1	.00							3	.00
Leg, right:														
Aneurism of	1	.00											1	.00
Contracture of	1	.00	2	.01	3	.01			1	.00			7	.00
Loss of	3	.01	5	.03	4	.01			3	.00			15	.01
Loss of, at ankle	7	.03	19	.11	11	.03	2	.23	7	.01			46	.03
Loss of, at knee	8	.04	11	.06	10	.03	1	.11	3	.00	1	.02	34	.02

TABLE 39.—*Final results of military agents, excluding gases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result*—Continued.

Results.	Rifle.		Shell.		Shrapnel.		Hand grenade.		Other gunshot.		Others.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total admissions	20,420		17,439		33,787		880		75,125		5,886		153,537	
Leg, right—Continued.														
Loss of, middle third	30	0.15	70	0.40	27	0.08	4	0.45	29	0.04	3	0.05	163	0.11
Neuritis of, following injury	2	.01	3	.02					7	.01	1	.02	13	.01
Paralysis of	29	.14	26	.15	33	.10	1	.11	39	.05	3	.05	131	.09
Paralysis of, from cord injuries			1	.01					1	.00			2	.00
Swollen from injured blood vessels	1	.00							1	.00			2	.00
Leg, left:														
Contracture of	2	.01	1	.01	6	.02			2	.00	1	.02	12	.01
Loss of	2	.01	7	.04	10	.03	1	.11	3	.00			23	.01
Loss of, at ankle	15	.07	35	.20	20	.06	1	.11	12	.02	2	.03	85	.06
Loss of, at knee	10	.05	26	.15	12	.04			6	.01			54	.04
Loss of, middle third	26	.13	72	.41	42	.12			22	.03	3	.05	165	.11
Neuritis of, following injury	2	.01			2	.01			9	.01			13	.01
Paralysis of	27	.13	18	.10	32	.09	1	.11	55	.07	1	.02	134	.09
Paralysis of, from cord injuries	1	.00							1	.00	1	.02	3	.00
Legs, both:														
Contracture of									2	.00			2	.00
Loss of			1	.01	1	.00							2	.00
Loss of, at ankle			1	.01	1	.00					1	.02	3	.00
Loss of, at knee									1	.00			1	.00
Loss of, middle third			5	.03	2	.01			2	.00			9	.01
Neuritis following injury									1	.00			1	.00
Paralysis of			1	.01	1	.00			1	.00			3	.00
Paralysis of, from cord injuries	1	.00	1	.01	1	.00			2	.00			5	.00
Swollen from injured blood vessels									1	.00			1	.00
Leg, s. n. s.:														
Contracture of limb	1	.00											1	.00
Loss of, below knee			10	.06	3	.01			7	.01	1	.02	21	.01
Loss of, at hip			1	.01	1	.00							2	.00
Loss of, at knee			6	.03	2	.01			3	.00	1	.02	12	.01
Loss of, at thigh	4	.02	10	.06	2	.01			1	.00			17	.01
Paralysis of limb	7	.03	6	.03	11	.03			8	.01	1	.02	33	.02
Paralysis of, from cord injuries					1	.00							1	.00
Ligament, relaxation of					2	.01			3	.00	10	.17	15	.01
Lower extremity, atrophy of muscle of	30	.15	26	.15	26	.08			36	.05	2	.03	120	.08
Lung, foreign bodies in	1	.00	3	.02	7	.02							11	.01
Muscle:														
Hernia of	1	.00	3	.02	7	.02			4	.01			15	.01
Loss of	91	.45	129	.74	205	.61	6	.68	145	.19	1	.02	577	.38
Nerves:														
Complication of	131	.64	111	.64	158	.47	3	.34	434	.58	7	.12	844	.55
Severed	2	.01			1	.00							3	.00
Severed and contracted					1	.00			1	.00			2	.00
Nose, loss of														
Ribs, loss of part					2	.01							2	.00
Rectum:														
Paralysis of, from cord injuries									1	.00			1	.00
Loss of control of sphincter	2	.01	2	.01	1	.00			1	.00	1	.02	7	.00
Loss of portion			1	.01									1	.00
Stenosis of					3	.01	1	.11					4	.00
Scapula, loss of right side	1	.00											1	.00
Shoulder, right:														
Ankylosis, bony, of	11	.05	6	.03	3	.01			6	.01			26	.02
Ankylosis, fibrous, of	16	.08	13	.07	29	.09			41	.05			99	.06
Ankylosis, partial and deformities, of	29	.14	31	.18	42	.12	2	.23	33	.04	3	.05	140	.09
Arthritis, chronic, of	1	.00	1	.01					1	.00			3	.00
Flail joint of			1	.01					5	.01			6	.00
Synovitis of			1	.01					1	.00			2	.00

TABLE 39.—*Final results of military agents, excluding gases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result*—Continued.

Results.	Rifle.		Shell.		Shrapnel.		Hand grenade.		Other gunshot.		Others.		Total.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total admissions	20,420		17,439		33,787		880		75,125		5,886		153,537	
Shoulder, left:														
Ankylosis, bony, of	1	0.00	3	0.02	6	0.02			7	0.01			17	0.01
Ankylosis, fibrous, of	23	.11	9	.05	30	.09			39	.05	1	.02	102	.07
Ankylosis, partial and deformities, of	30	.15	36	.21	47	.14			31	.04	2	.03	146	.10
Arthritis, chronic, of			2	.01									2	.00
Flail joint of	1	.00			1	.00			1	.00			3	.00
Synovitis of									2	.00			2	.00
Shoulders, both:														
Ankylosis, bony, of														
Ankylosis, fibrous, of														
Ankylosis, partial and deformities, of			1	.01									1	.00
Arthritis, chronic, of														
Shoulder, s. n. s.:														
Ankylosis, bony, of	1	.00	1	.01	5	.01			4	.01			11	.01
Ankylosis, fibrous, of	11	.05	2	.01	17	.05			24	.03			54	.04
Ankylosis, partial and deformities, of	13	.06	15	.09	22	.07			9	.01			59	.04
Arthritis, chronic, of									1	.00			1	.00
Flail joint of	1	.00	1	.01					1	.00			3	.00
Spine:														
Ankylosis of	8	.04	15	.09	15	.04			16	.02	10	.17	64	.04
Arthritis of			1	.01							2	.03	3	.00
Spleen, infection of									3	.00			3	.00
Teeth, loss of	38	.19	27	.15	16	.05			40	.05	2	.03	123	.08
Tendon:														
Adherent in scars	8	.04	2	.01	18	.05			9	.01	1	.02	38	.02
Severed and contracted	16	.08	13	.07	24	.07	1	0.11	26	.03	1	.02	81	.05
Testicle, loss of	9	.04	11	.06	15	.04	1	.11	11	.01	1	.02	48	.03
Thigh, right:														
Loss of, upper third	32	.16	52	.30	29	.09	1	.11	16	.02	1	.02	131	.09
Loss of, middle third	38	.19	113	.65	61	.18	5	.57	32	.04	4	.07	253	.16
Loss of, lower third	38	.19	89	.51	51	.15			21	.03	2	.03	201	.13
Neuritis, following injury	1	.00	1	.01	2	.01			2	.00			6	.00
Thigh, left:														
Loss of, upper third	21	.10	44	.25	22	.07	2	.23	14	.02			103	.07
Loss of, middle third	46	.23	123	.71	53	.16			31	.04	1	.02	254	.17
Loss of, lower third	40	.20	102	.58	48	.14			24	.03			214	.14
Neuritis, following injury									1	.00			1	.00
Thighs, both:														
Loss of, upper third	1	.00											1	.00
Loss of, middle third	2	.01	3	.02	1	.00			1	.00			7	.00
Loss of, lower third	1	.00	1	.01					1	.00			3	.00
Neuritis of, following injury	1	.00	2	.01	2	.01			1	.00			6	.00
Thigh, s. n. s., aneurism (location not stated)							1	.11					1	.00
Trachea, stenosis of	2	.01			2	.01			1	.00			5	.00
Upper extremity, atrophy of muscle of	37	.18	22	.13	38	.11			37	.05	2	.03	136	.09
Wrist, right:														
Ankylosis, bony, of	3	.01	3	.02	4	.01			3	.00			13	.01
Ankylosis, fibrous, of	14	.07	6	.03	19	.06			22	.03	1	.02	62	.04
Ankylosis, partial and deformities, of	10	.05	14	.08	28	.08	1	.11	22	.03	2	.03	77	.05
Arthritis, chronic, of					2	.01					1	.02	3	.00
Wrist, left:														
Ankylosis, bony, of	5	.02	1	.01	3	.01			7	.01	1	.02	17	.01
Ankylosis, fibrous, of	21	.10	6	.03	18	.05			29	.04			74	.05
Ankylosis, partial and deformities, of	20	.10	14	.08	32	.09			34	.05	2	.03	102	.07
Arthritis, chronic, of			2	.01	1	.00			1	.00			4	.00
Synovitis, chronic, of									1	.00			1	.00
Wrists, both:														
Ankylosis, bony, of														
Ankylosis, fibrous, of									1	.00			1	.00
Ankylosis, partial and deformities of														
Arthritis, chronic, of			1	.01									1	.00

TABLE 39.—*Final results of military agents, excluding gases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result*—Continued.

	Rifle.		Shell.		Shrapnel.		Hand grenade.		Other gunshot.		Others.		Total.	
Total admissions	20,420		17,439		33,787		880		75,125		5,886		153,537	
Results.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Wrist, s. n. s.:														
Ankylosis, bony, of	2	0.01	1	0.01	3	0.01			4	0.01			10	0.01
Ankylosis, fibrous, of	9	.04	6	.03	11	.03	1	0.11	29	.04	1	0.02	57	.04
Ankylosis, partial and deformities of	14	.07	12	.07	24	.07			12	.02	1	.02	63	.04
Arthritis, chronic, of			1	.01									1	.00
Aneurism:														
Not specified									2	.00			2	.00
Abdominal					1	.00							1	.00
Aorta, thoracic	2	.01	1	.01									3	.00
Arteriovenous			1	.01	1	.00			3	.00			5	.00
Artery, axillary	1	.00											1	.00
Artery, carotid									1	.00			1	.00
Artery, femoral	1	.00							2	.00			3	.00
Aphasia	2	.01			2	.01			3	.00			7	.00
Bone tissue, loss of	102	.50	75	.43	116	.34	2	.23	175	.23	6	.10	476	.31
Bulbar palsy									1	.00			1	.00
Bronchitis, chronic	14	.07	11	.06	25	.07	1	.11	30	.04	28	.48	109	.07
Cardiac dilatation									1	.00			1	.00
Chest, deformities of, from injury	1	.00	3	.02	1	.00			1	.00	1	.02	7	.00
Conjunctivitis, chronic			1	.01							1	.02	2	.00
Convalescent from wounds	134	.66	98	.56	182	.54	6	.68	149	.20	1	.02	570	.37
Deformities, larynx					1	.00							1	.00
Epilepsy			1	.01	2	.01			2	.00			5	.00
Epilepsy, Jacksonian					1	.00			1	.00			2	.00
Fistula:														
Fecal	2	.01	2	.01	2	.01			5	.01	1	.02	12	.01
Other	2	.01	1	.01	2	.01							5	.00
Retrovesical			1	.01									1	.00
Retroureteral									1	.00			1	.00
Urinary	1	.00			1	.00			2	.00			4	.00
Fracture:														
Deforming	160	.78	92	.53	186	.55	2	.23	172	.23	15	.25	627	.41
Faulty union	93	.46	59	.34	102	.30	1	.11	197	.26	10	.17	462	.30
Old, ununited	15	.07	13	.07	19	.06			15	.02	1	.02	63	.04
Glaucoma, secondary	1	.00	1	.01					1	.00			3	.00
Heel, painful	1	.00							1	.00			2	.00
Hemiplegia	8	.04	6	.03	10	.03			16	.02	1	.02	41	.03
Hernia:														
Cerebral			1	.01	1	.00			1	.00			3	.00
Ventral	5	.02	2	.01	7	.02			6	.01			20	.01
Not specified	2	.01			4	.01							6	.00
Laryngitis, chronic					2	.01			2	.00	1	.02	5	.00
Leucoma					3	.01	2	.23	2	.00	1	.02	8	.01
Leucoma, adhereus	1	.00											1	.00
Monoplegia									4	.01			4	.00
Neuritis, n. s	2	.01							2	.00			4	.00
Optic atrophy	4	.02	5	.03	15	.04	3	.34	4	.01			31	.02
Osteomyelitis	48	.24	40	.23	61	.18	2	.23	122	.16	2	.03	275	.18
Paraplegia	7	.03	6	.03	5	.01			10	.01	2	.03	30	.02
Pleurisy and adherent pleura	77	.38	46	.26	57	.17			65	.09			245	.16
Speech, paralysis of	6	.03	2	.01	3	.01			5	.01	1	.02	17	.01
Scar, adherent or painful	386	1.89	357	2.05	684	2.03	24	2.73	425	.57	13	.22	1,889	1.23
Sacro-iliac ankylosis	1	.00	3	.02	1	.00			2	.00	3	.05	10	.01
Synovitis, chronic, n. s	1	.00			2	.01					1	.02	4	.00
Taste, paralysis of			1	.01									1	.00
Tempero-maxillary ankylosis	3	.01	3	.02	1	.00			6	.01			13	.01
Thrombophlebitis					2	.01			1	.00			3	.00
Others	1	.00	1	.01	5	.01			2	.00	5	.08	14	.01
Total	3,739	18.30	3,843	22.04	5,217	15.44	213	24.20	5,579	7.43	549	9.33	19,140	12.47

NOTE.—S. n. s. signifies, "Side not specified." N. s. signifies, "Not specified."

TABLE 40.—*Final results of gas cases (deaths excepted), battle injuries, American Expeditionary Forces, 1917 and 1918—Absolute numbers and per cent of the total number of cases for each result.*

	Gas, poisonous, kind not stated.		Chlorine.		Mustard gas.		Phosgene.		Total.	
Admissions	33,587		1,843		27,711		6,834		[1] 70,552	
Results.	Number	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Amblyopia	12	0.04			3	0.01			15	0.02
Asthma	6	.02	2	0.11	5	.02	1	0.01	14	.02
Athetosis	1	.00			1	.00	1	.01	3	.00
Cardiac arrhythmia, others	1	.00					1	.01	2	.00
Cardiac dilatation	3	.01							3	.00
Cardiac disorder, functional	72	.21	5	.27	13	.05	6	.09	96	.14
Cardiac hypertrophy	3	.01			1	.00			4	.01
Cardiac hypertrophy and dilatation	1	.00	1	.05	1	.00			3	.00
Leucoma	10	.03			3	.01			13	.02
Loss of hand, part of right					1	.00			1	.00
Loss of sight, right eye	7	.02			5	.02			12	.02
Loss of sight, left eye	8	.02			2	.01			10	.01
Loss of sight, both eyes	3	.01			1	.00			4	.01
Loss of sight, one eye, side not specified	2	.01							2	.00
Loss of eye, side not specified					1	.00			1	.00
Loss of eye, right	2	.01			2	.01			4	.01
Paralysis speech	5	.01							5	.01
Neuritis, forearm, left	2	.01							2	.00
Neuritis, location not specified	2	.01							2	.00
Optic atrophy	2	.01							2	.00
Synovitis, chronic, knee, right					1	.01			1	.00
Nerve complication	5	.01							5	.01
Convalescing from wounds	5	.01	1	.05					6	.01
Scar adherent or painful	4	.01			11	.04			15	.02
Chronic bronchitis	1,868	5.56	41	2.22	238	.86	51	.75	2,198	3.12
Chronic laryngitis	27	.08	2	.11	6	.02	4	.06	39	.06
Pleurisy and adherent pleura	35	.10	4	.22	4	.01	4	.06	47	.07
Chronic conjunctivitis	12	.04			10	.04	1	.01	23	.03
Others	13	.04			10	.04	1	.01	24	.03
Total	2,111	6.29	56	3.04	319	1.15	70	1.02	2,556	3.62

[1] Includes 577 cases of arsine gassing for which there were no final results.

One hundred and seventy-three cases of tuberculosis occurred during 1918 and 1919 among the 70,552 men who had been gassed in action. Of this number 78 had been gassed by gas, kind not specified; 8 by chlorine; 65 by mustard; and 22 by phosgene. The number of cases of tuberculosis for each 1,000 men gassed was 2.45. Since the annual rate of occurrence for tuberculosis among enlisted men serving in Europe in 1918 was 3.50, and in 1919, 4.30 per 1,000, it would seem to be apparent that tuberculosis did not occur any more frequently among the soldiers who had been gassed than among those who had not been.

CASUALTIES, AMERICAN FORCES IN RUSSIA AND SIBERIA.

American troops served in North Russia from the summer of 1918 to the summer of 1919, and in Siberia, in the locality of Vladivostok, from the summer of 1918 through the year 1919. Tables 41 and 42 show, so far as the reports forwarded to this office permit, the patients treated in hospitals, the time lost as the result of battle injuries, and the deaths that occurred among them during the entire period, for both countries. As the reports furnished were very incomplete, it must be clearly understood that these tables are, as a result, incomplete.

Table 43 shows the strength of the United States troops serving in these two regions, by months.

TABLE 41.—*Strength of the United States Army in Russia and Siberia, 1918 and 1919.*

Months.	Russia.			Siberia.			Total.		
	Officers.	Enlisted, white.	Total officers and enlisted men.	Officers.	Enlisted, white.	Total officers and enlisted men.	Officers.	Enlisted, white.	Total officers and enlisted men.
1918.									
August	146	4,592	4,738	44	1,045	1,089	190	5,637	5,827
September	143	4,561	4,704	129	2,924	3,053	272	7,485	7,757
October	153	4,978	5,131	221	6,596	6,817	374	11,574	11,948
November	151	4,943	5,094	209	7,681	7,890	360	12,624	12,984
December	150	4,817	4,967	181	7,668	7,849	331	12,485	12,816
Total, 1918	743	23,891	24,634	784	25,914	26,698	1,527	49,805	51,332
1919.									
January	161	4,764	4,925	278	8,616	8,894	439	13,380	14,608
February	158	4,735	4,893	292	8,485	8,777	450	13,220	13,670
March	162	4,713	4,875	282	8,381	8,663	444	13,094	13,538
April	222	5,385	5,607	323	8,283	8,606	545	13,668	14,213
May	219	5,079	5,298	319	8,194	8,513	538	13,273	13,811
June	50	703	753	337	8,074	8,411	387	8,777	9,164
July	14	31	45	327	8,028	8,355	341	8,059	8,400
August	.....	.....	.....	324	8,125	8,449	324	8,125	8,449
September	.....	.....	.....	322	7,914	8,236	322	7,914	8,236
October	.....	.....	.....	291	6,904	7,195	291	6,904	7,195
November	.....	.....	.....	262	7,283	7,545	262	7,283	7,545
December	.....	.....	.....	262	7,283	7,545	262	7,283	7,545
Total, 1919	986	25,410	26,396	3,619	95,570	99,189	4,605	120,980	125,585
Total for occupation period	1,729	49,301	51,030	4,403	121,484	125,887	6,132	170,785	176,917
Aggregate annual strengths for period.	144	4,108	4,253	367	10,124	10,490	511	14,232	14,743

TABLE 42.—*Admissions and days lost, battle injuries, United States troops in Russia and Siberia, 1918 and 1919—Absolute numbers and ratios per 1,000.*[1]

	Admissions.						Days lost.[2]					
	Officers.		Enlisted, white.		Total officers and enlisted men.		Officers.		Enlisted, white.		Total officers and enlisted men.	
Mean strength	511		14,232		14,743		511		14,232		14,743	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.[1]	Number.	Ratio.[1]	Number.	Ratio.[1]
Diagnoses:												
Contusion	.....	.....	1	0.07	1	0.07	.....	.....	31	0.01	31	0.01
Concussion	.....	.....	1	.07	1	.07	.....	.....	22	.00	22	.00
Fractures	3	5.87	31	2.18	34	2.31	238	1.28	2,209	.43	2,447	.45
Gases, deleterious	1	1.96	.....	.....	1	.07	142	.76	.....	.....	142	.03
Wound—												
Contused	.....	.....	1	.07	1	.07	.....	.....	22	.00	22	.00
Lacerated	.....	.....	10	.70	10	.68	.....	.....	484	.09	484	.09
Multiple	1	1.96	13	.91	14	.95	131	.70	1,103	.21	1,234	.23
Penetrating	6	11.74	92	6.46	98	6.65	158	.85	4,625	.89	4,783	.89
Perforating	1	1.96	9	.63	10	.68	50	.27	428	.08	478	.09
Others	.....	.....	1	.07	1	.07	.....	.....	32	.01	32	.01
Total	12	23.48	159	11.17	171	11.60	719	3.86	8,956	1.72	9,675	1.80
Causative agents:												
Mustard gas	1	1.96	.....	.....	1	.07	142	.76	.....	.....	142	.03
Gunshot missile; kind not specified	2	3.91	31	2.18	33	2.24	13	.07	2,772	.53	2,785	.52
Rifle ball	8	15.66	106	7.45	114	7.73	433	2.32	4,806	.93	5,239	.97
Shell	.....	.....	9	.63	9	.61	.....	.....	405	.08	405	.08
Shrapnel	.....	.....	10	.70	10	.68	.....	.....	888	.17	888	.17
Hand grenade	1	1.96	.....	.....	1	.07	131	.70	.....	.....	131	.02
Indirect result of military agent	.....	.....	2	.14	2	.14	.....	.....	53	.01	53	.01
Others	.....	.....	1	.07	1	.07	.....	.....	32	.01	32	.01
Total	12	23.48	159	11.17	171	11.60	719	3.86	8,956	1.72	9,675	1.80

[1] Reports received apparently very incomplete. Figures in the tables consequently probably do not include all cases.
[2] Noneffective rate.

TABLE 43.—*Deaths in hospital, battle injuries, United States troops in Russia and Siberia, 1918 and 1919—Absolute numbers and ratios per 1,000.*[1]

	Officers.		Enlisted white.		Total officers and enlisted men.	
Mean strength	511		14,232		14,743	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.
Diagnoses:						
Fractures	1	1.96	1	0.07	2	0.14
Wound—						
Multiple	.....	.....	4	.28	4	.27
Penetrating	1	1.96	6	.42	7	.47
Perforating	.....	.....	1	.07	1	.07
Total	2	3.91	12	.84	14	.95
Causative agents:						
Gunshot missile; kind not specified	.....	.....	3	.21	3	.20
Rifle ball	2	3.91	6	.42	8	.54
Shell	.....	.....	2	.14	2	.14
Shrapnel	.....	.....	1	.07	1	.07
Total	2	3.91	12	.84	14	.95

[1] Reports received apparently very incomplete. Figures in the tables consequently probably do not include all cases.

HEALTH OF THE ARMY.

STRENGTH OF THE ARMY.

After the signing of the armistice on November 11, 1918, and the consequent beginning of the demobilization, the strength of the war Army materially decreased during the latter part of 1918, dropping in December to 2,985,164 for total officers and men, American and native troops, from 3,551,447 in the preceding October. During the year 1919 the demobilization continued rapidly, and in November the minimum strength of the year, 209,208 officers and men, was reached.

Considerable difficulty was experienced during the year in obtaining accurate and adequate returns of the number of military personnel serving in the various countries where American troops were stationed. The strength used in the reports of this office is prepared as far as is practicable from monthly reports furnished from each individual post or command by the senior medical officer present for duty. These monthly reports show the average daily strength during the month for officers and white, colored, and insular enlisted men. An annual strength obtained from 12 such monthly strengths is thus an actual average daily strength for the year. During the year these reports were furnished for troops serving in the United States, Philippine Islands, Hawaii, Porto Rico, Panama, and Siberia; and during the last three months for the troops in Germany. It was, however, found impracticable to obtain them for the commands serving in the American Expeditionary Forces and in North Russia; and few, if any, were furnished for troops traveling on transports.

Those reports furnished in the United States during 1919 from the larger camps were frequently inaccurate, due to their failure to take up and account for, on their daily averages, the large number of soldiers sent to them for demobilization. Such morbidity and mortality as occurred among the men being demobilized was of necessity charged to camps where it occurred. It was obviously necessary to account for the strength from which these sick were drawn. Careful comparisons were made between information obtained from the monthly reports of strength furnished and the reports showing the number of men demobilized. From these sources of information such corrections were made as were indicated.

During the first nine months of 1919 it was necessary, as had been the case during 1918, to use the strength furnished by the statistical branch of the Office of the Chief of Staff for the troops serving in the American Expeditionary Forces. That office in turn obtained the strength either from The Adjutant General of the Army or from the General Headquarters, American Expeditionary Forces. These offices, however, reported the strength only for the last day of the month. Where an expeditionary force is increasing or decreasing rapidly such a strength does not furnish a satisfactory average for the month. As used in this report, the strength on the last day of each preceding month has been taken as the strength for the following

month. No separate strength was reported for white and colored troops. To obtain these data, estimates were made based upon the number of white and colored troops demobilized in the United States, due consideration being given to the reduction in the total strength in the United States and in Europe. The data thus obtained compared favorably with reports that were furnished to this office by medical officers during the last three months of 1919.

To obtain the strength of troops traveling on transports, which had necessarily to be considered, estimates were made based on the strength of the troops in the United States, the strength in Europe, and the number of men demobilized.

TABLE 44.—*Strength of the Army, 1919.*

Months.	Officers.				Enlisted men.			Total.		
	In United States.	In Europe.	All others.	Total.	White American troops.	Colored American troops.	Total white and colored.	Enlisted native troops.	Officers and enlisted men.	Officers and enlisted men, including native troops.
January	48,362	69,961	3,911	122,234	2,212,359	230,288	2,442,647	20,627	2,554,881	2,585,508
February	38,394	61,620	4,796	104,810	1,879,940	203,273	2,083,213	16,561	2,188,023	2,204,584
March	34,702	53,474	4,832	93,008	1,628,823	170,919	1,799,742	14,151	1,892,750	1,906,901
April	31,986	43,415	5,731	81,132	1,325,047	152,320	1,477,367	12,959	1,558,499	1,571,458
May	29,036	31,521	6,361	66,918	996,038	140,609	1,136,647	12,182	1,203,555	1,215,747
June	25,907	20,313	6,075	52,295	648,715	114,696	763,411	12,726	815,706	828,432
July	24,876	7,754	6,561	39,191	427,064	40,870	467,934	10,949	507,125	518,074
August	23,208	3,868	3,004	30,080	257,885	21,595	279,480	10,085	309,560	319,645
September	20,561	2,797	1,831	25,189	211,405	14,742	226,147	10,273	251,336	261,609
October	17,333	1,656	1,888	20,877	185,867	10,989	196,856	9,919	217,733	227,652
November	12,904	1,347	1,394	15,645	172,860	10,711	183,571	9,992	199,216	209,208
December	12,763	1,074	1,436	15,273	175,403	10,668	186,071	10,398	201,344	211,742
Total	320,032	298,800	47,820	666,652	10,121,406	1,121,680	11,243,086	159,822	11,909,738	12,060,560
Mean annual strength	26,669	24,900	3,985	55,554	843,451	93,473	936,924	12,569	992,478	1,005,047

Table 44 and figure 14 have been prepared to show for 1919 by months the strength of the total Army, officers and men, American and native troops. At the beginning of the year, as a result of the more rapid demobilization of the troops in the United States during the latter part of 1918, the strength of the Army in Europe was greater. It, however, decreased rapidly, and during the month of June passed below that of the United States. After this time it continued to decrease, and in December there were only 19,453 in Europe, consisting almost entirely of the Army of Occupation in Germany.

STRENGTH OF OFFICERS
U. S., EUROPE AND TOTAL ARMY
MONTHS, 1919

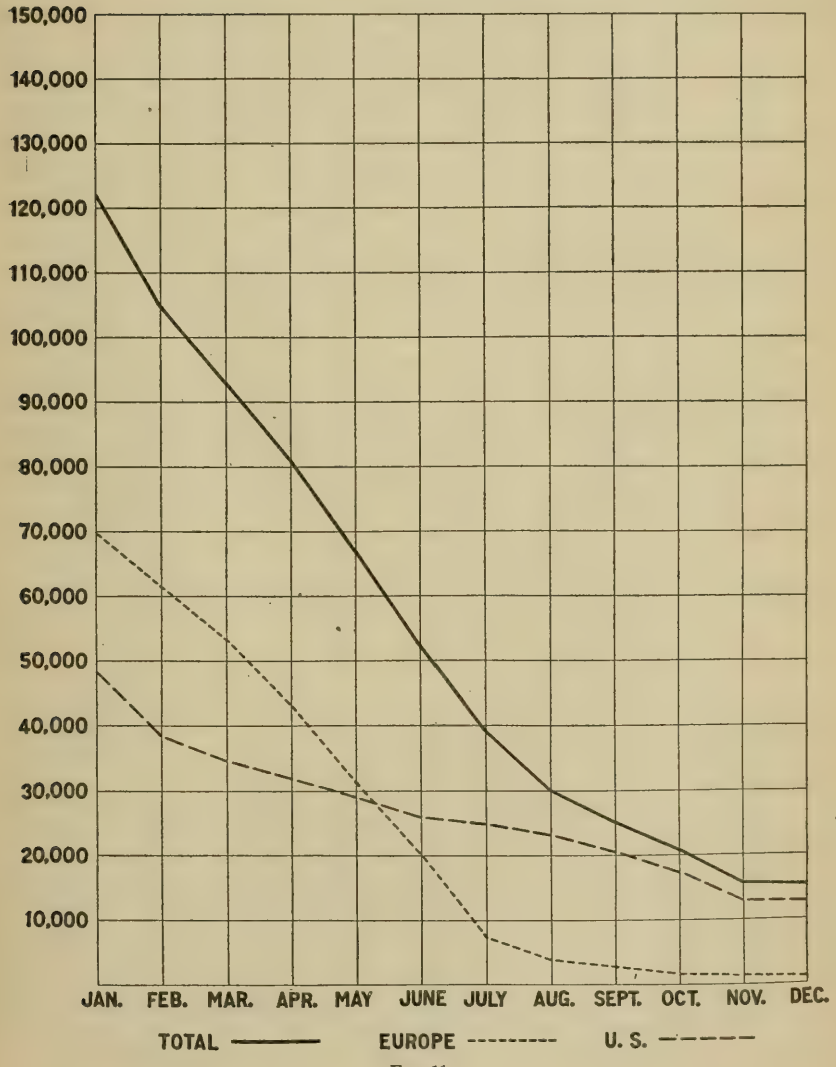


FIG. 11.

STRENGTH, WHITE ENLISTED MEN
U. S., EUROPE AND TOTAL ARMY
MONTHS, 1919

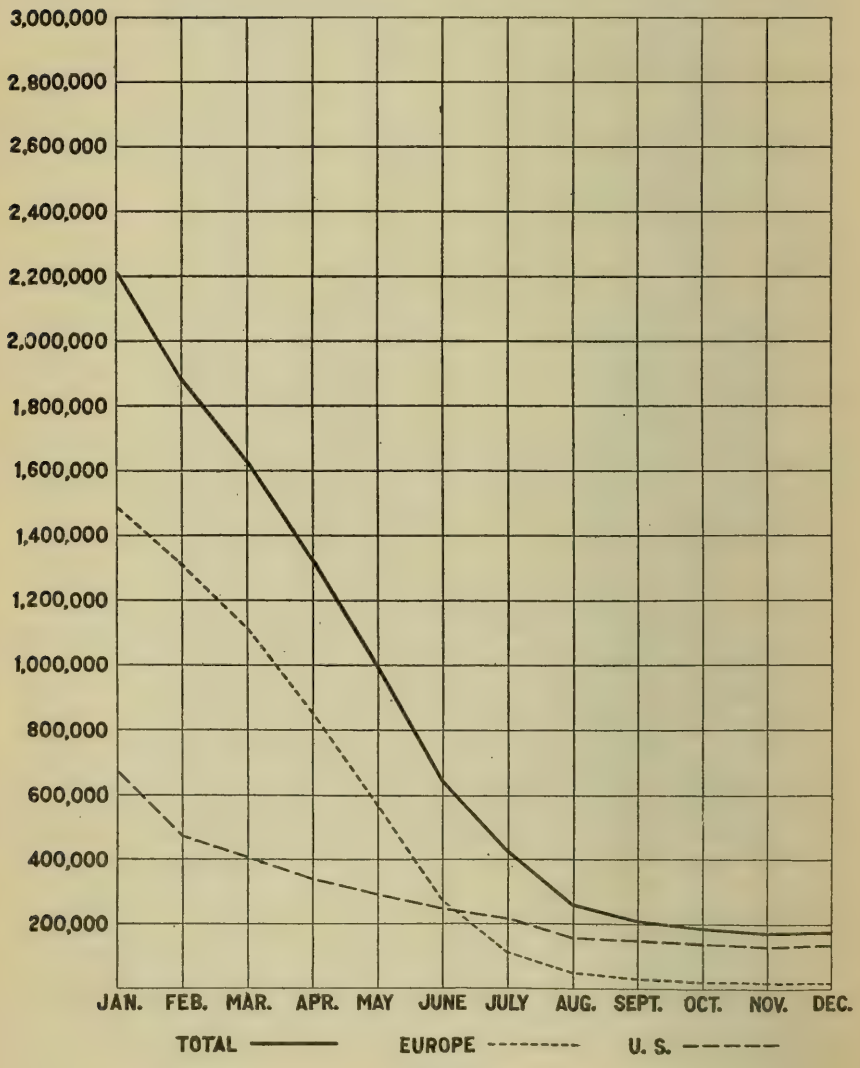


FIG. 12.

TABLE 45.—*Strength of the U. S. Army serving in the United States and in Europe, 1919, by months.*

Months.	United States.[1]					Europe.[2]				
	Officers.	Enlisted white.	Enlisted colored.	Total enlisted.	Total officers and enlisted men.	Officers.	Enlisted white.	Enlisted colored.	Total enlisted.	Total officers and enlisted men.
January	48,362	672,937	68,337	741,274	789,636	69,800	1,488,683	140,396	1,629,079	1,698,879
February	38,394	471,815	66,104	537,919	576,313	61,462	1,310,083	131,219	1,441,302	1,502,764
March	34,702	406,839	44,634	451,473	486,175	53,312	1,115,693	123,152	1,238,845	1,292,157
April	31,986	339,836	29,824	369,660	401,646	43,193	853,425	119,801	973,226	1,016,419
May	29,036	291,810	20,780	312,590	341,626	31,302	569,842	108,650	678,492	709,794
June	25,907	246,903	18,562	265,465	291,372	20,263	271,633	64,166	335,799	356,062
July	24,876	215,104	20,058	235,162	260,038	7,740	111,634	12,508	124,142	131,882
August	23,208	156,791	18,013	174,804	198,012	3,868	48,006	1,741	49,747	53,615
September	20,561	149,360	11,322	160,682	181,243	2,797	30,315	1,287	31,602	34,399
October	17,333	139,877	9,084	148,961	166,294	1,656	21,055	185	21,240	22,896
November	12,904	132,403	8,792	141,195	154,099	1,347	18,920	83	19,003	20,350
December	12,763	135,441	8,935	144,376	157,139	1,074	18,379	.....	18,379	19,453
Total	320,032	3,359,116	324,445	3,683,561	4,003,593	297,814	5,857,668	703,188	6,560,856	6,858,670
Mean annual strength	26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556

[1] Source of information: Monthly reports of sick and wounded to the Surgeon General's Office; daily average strength for each month.
[2] Source of information: Adjutant General's Office; strength of each month that on the last day of each preceding month. Separate strength of white and colored estimated from demobilization figures in the United States.

Table 45 shows the strength for the troops serving in the United States and in Europe by months. Figures 12 and 13 show for the white and colored troops the strength by months for the United States, Europe, and the total Army. Both show, as did figure 14, that the strength in Europe exceeded that in the United States during the early part of the year, and passed below it in June. At the end of the year there were no colored troops serving in Europe.

TABLE 46.—*Strength of troops stationed in the United States, by months, 1919.*[1]

Months.	Outside of large camps.				In large camps.			
	Officers.	Enlisted white.	Enlisted colored.	Total enlisted men.	Officers.	Enlisted white.	Enlisted colored.	Total enlisted men.
January	26,896	297,713	22,056	319,769	21,466	375,224	46,281	421,505
February	23,345	244,520	22,202	266,722	15,049	227,295	43,902	271,197
March	22,035	218,591	17,753	236,344	12,667	188,248	26,881	215,129
April	21,284	185,892	12,769	198,661	10,702	153,944	17,055	170,999
May	19,518	165,046	10,307	175,353	9,518	126,764	10,473	137,237
June	16,925	145,156	10,131	155,287	8,982	101,747	8,431	110,178
July	16,141	135,484	9,508	144,992	8,735	79,620	10,550	90,170
August	15,029	106,278	13,352	119,630	8,179	50,513	4,661	55,174
September	13,885	99,774	9,818	109,592	6,676	49,586	1,504	51,090
October	12,617	97,110	8,762	105,872	4,716	42,767	322	43,089
November	9,451	91,456	8,530	99,986	3,453	40,947	262	41,209
December	9,307	93,358	8,751	102,109	3,456	42,083	184	42,267
Total	206,433	1,880,378	153,939	2,034,317	113,599	1,478,738	170,506	1,649,244
Mean annual strength	17,203	156,698	12,828	169,526	9,467	123,228	14,209	137,437

[1] Source of information: Monthly sick and wounded reports to the Surgeon General's Office; daily average strength for each month.

STRENGTH, COLORED ENLISTED MEN
U. S., EUROPE AND TOTAL ARMY
MONTHS, 1919

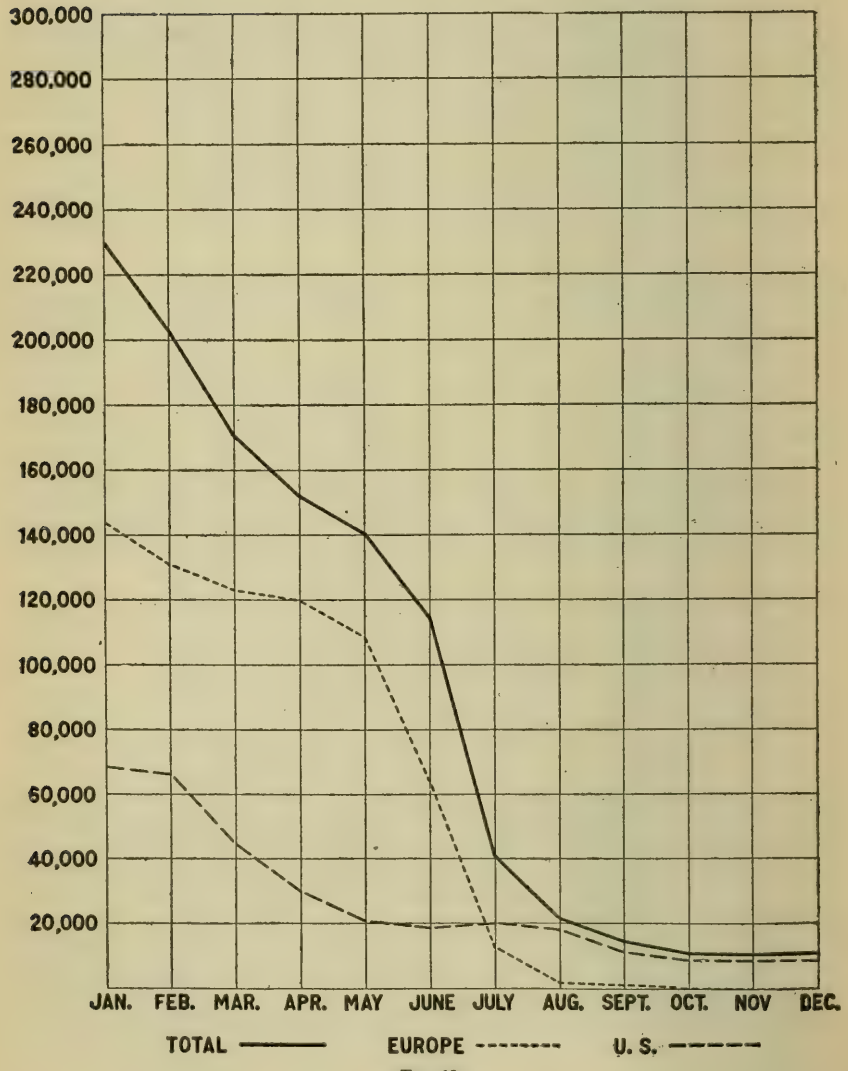


FIG. 13.

STRENGTH, TOTAL OFFICERS AND MEN
U. S., EUROPE AND TOTAL ARMY
MONTHS, 1919

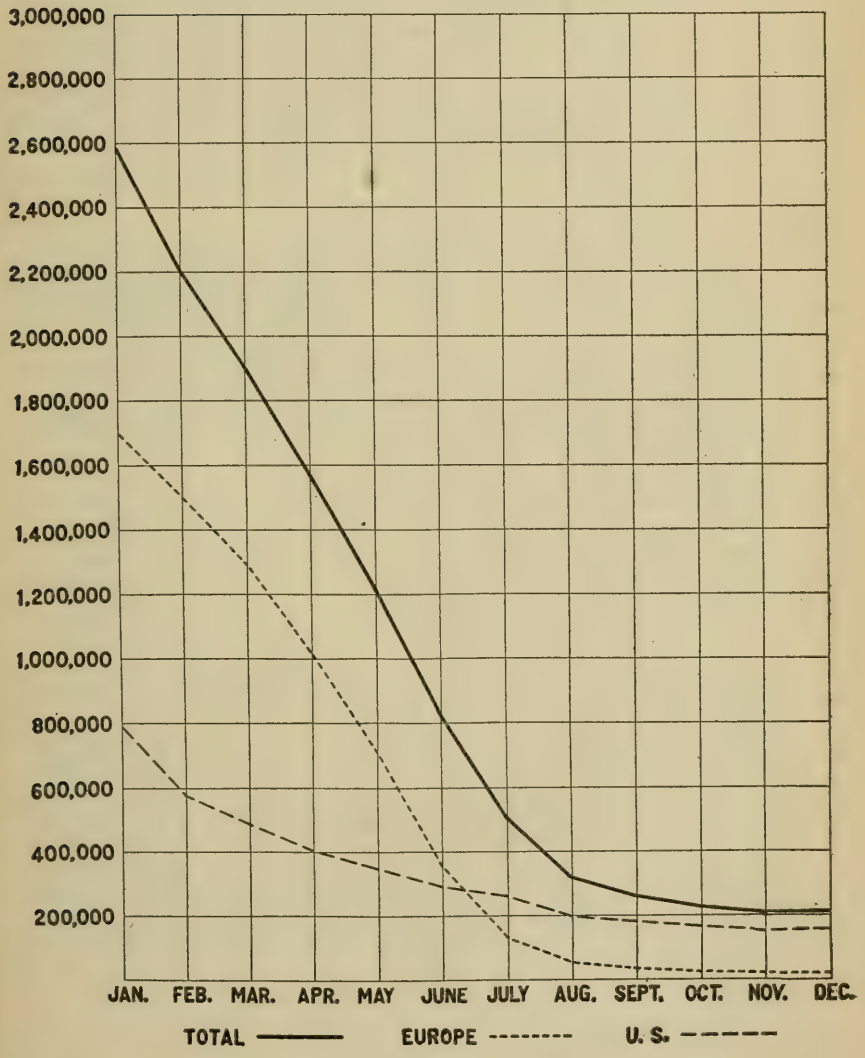


FIG. 14.

At the beginning of the year in the United States 421,505 enlisted men were stationed in such of the large camps as were then garrisoned (see map, fig. 29) and 319,769 in the smaller camps and posts. At the end of the year the conditions were reversed, 102,109 enlisted men being stationed in the smaller camps and posts and 42,267 in the larger camps.

TABLE 47.—*Strength, native troops, 1919.*[1]

Months.	Porto Ricans.			Filipinos.	Hawaiians.	Total native troops.
	Porto Rico.	Panama.	Total.			
January	1,655	3,895	5,550	8,273	6,804	20,627
February	1,135	2,738	3,873	8,342	4,346	16,561
March	1,299	550	1,849	8,633	3,669	14,151
April	1,529	5	1,534	8,138	3,287	12,959
May	1,551	7	1,558	8,109	2,515	12,182
June	1,537	6	1,543	8,245	2,938	12,726
July	1,522	5	1,527	8,328	1,094	10,949
August	1,538	5	1,543	8,355	187	10,085
September	1,521	6	1,527	8,655	91	10,273
October	1,542	5	1,547	8,322	50	9,919
November	1,520	5	1,525	8,442	25	9,992
December	1,520	5	1,525	8,849	24	10,398
Total	17,869	7,232	25,101	100,691	25,030	150,822
Mean annual strength	1,489	603	2,092	8,391	2,086	12,569

[1] Source of information: Monthly sick and wounded reports to the Surgeon General's Office; daily average strength for each month.

The strength of the native troops, namely, Filipinos, Porto Ricans, and Hawaiians, is shown in Table 47. Hawaiian troops were not composed entirely of native Hawaiians, but had in addition many Chinese and Japanese who had been added to the National Army as a result of the selective service act. The total strength of these troops in January was 20,627. During the year it decreased rapidly to reach the low mark of 9,992 in November.

MOVEMENT OF THE SICK.

At the beginning of the year 1919 the pandemic of influenza which had swept over the whole world in the latter part of 1918, and which had caused a very large amount of sickness and many deaths among the military personnel of the United States Army wherever our troops were serving, was still in progress, though it was decreasing rapidly.

As a result of the physical examinations held during the demobilization of the war Army in 1918 and 1919, a great number of soldiers were detected with defects which, in the opinion of the examining physicians, caused a disability rated at 10 per cent or more. Many, if not all, of these cases occurring in 1919 were reported to this office and are included in the statistics for the calendar year. Each case so reported was counted both as an admission to sick report and as a discharge.

It was the definite policy of the War Department during demobilization to retain under treatment in hospitals all officers and enlisted men affected with tuberculosis or other chronic disease, as well as all the wounded, until the maximum degree of improvement was attained. These three factors, the continuance of the influenza epi-

ENLISTED MEN, TOTAL ARMY*- ALL CAUSES
1910 - 1919
RATIOS PER 1000
ADMISSIONS
NON-EFFECTIVES
DISCHARGES
DEATHS
* AMERICAN TROOPS ONLY

FIG. 15.

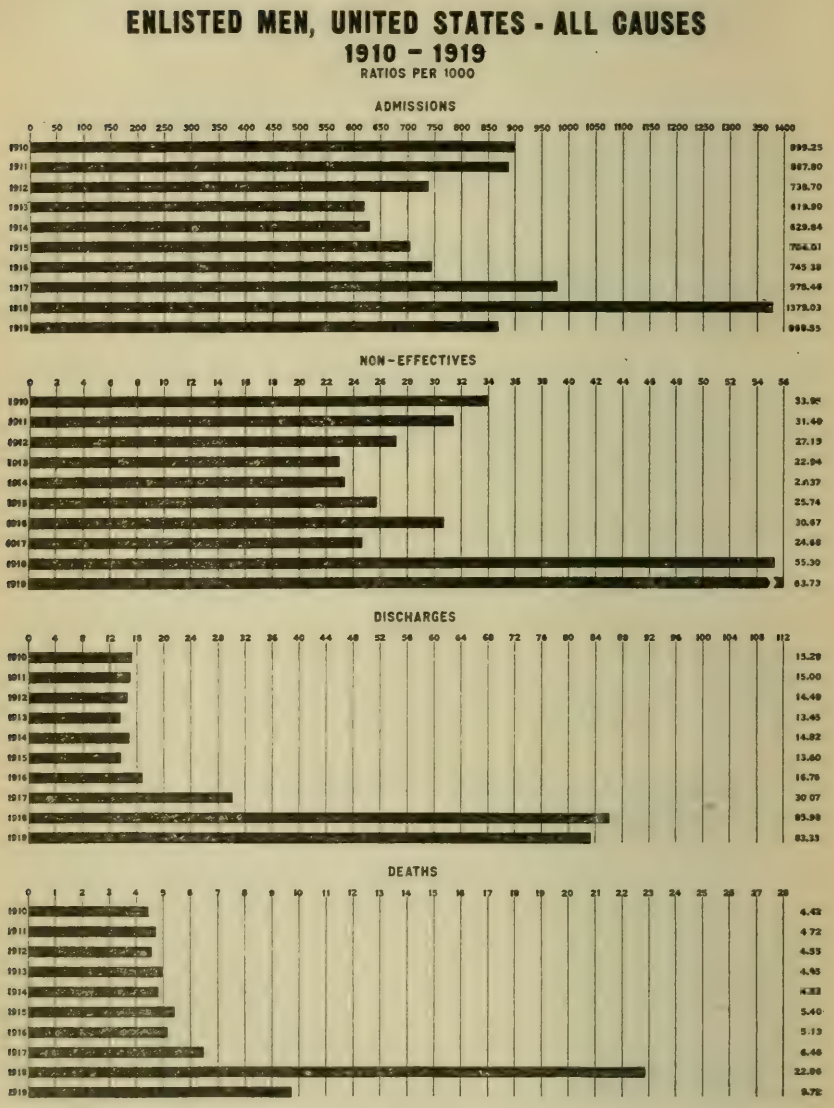

ENLISTED MEN, UNITED STATES - ALL CAUSES
1910 - 1919
RATIOS PER 1000
ADMISSIONS
0 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100 1150 1200 1250 1300 1350 1400
1910 899.25
1911 867.80
1912 738.70
1913 619.90
1914 629.84
1915 764.01
1916 745.38
1917 978.48
1918 1378.03
1919 960.55
NON-EFFECTIVES
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56
1910 33.98
1911 31.49
1912 27.19
1913 22.94
1914 24.37
1915 25.74
1916 30.67
1917 24.68
1918 55.39
1919 63.73
DISCHARGES
0 4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96 100 104 108 112
1910 15.29
1911 15.00
1912 14.49
1913 13.45
1914 14.82
1915 13.60
1916 16.76
1917 30.07
1918 85.98
1919 83.33
DEATHS
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
1910 4.43
1911 4.72
1912 4.55
1913 4.95
1914 4.83
1915 5.40
1916 5.13
1917 6.46
1918 22.86
1919 9.72

FIG. 16.

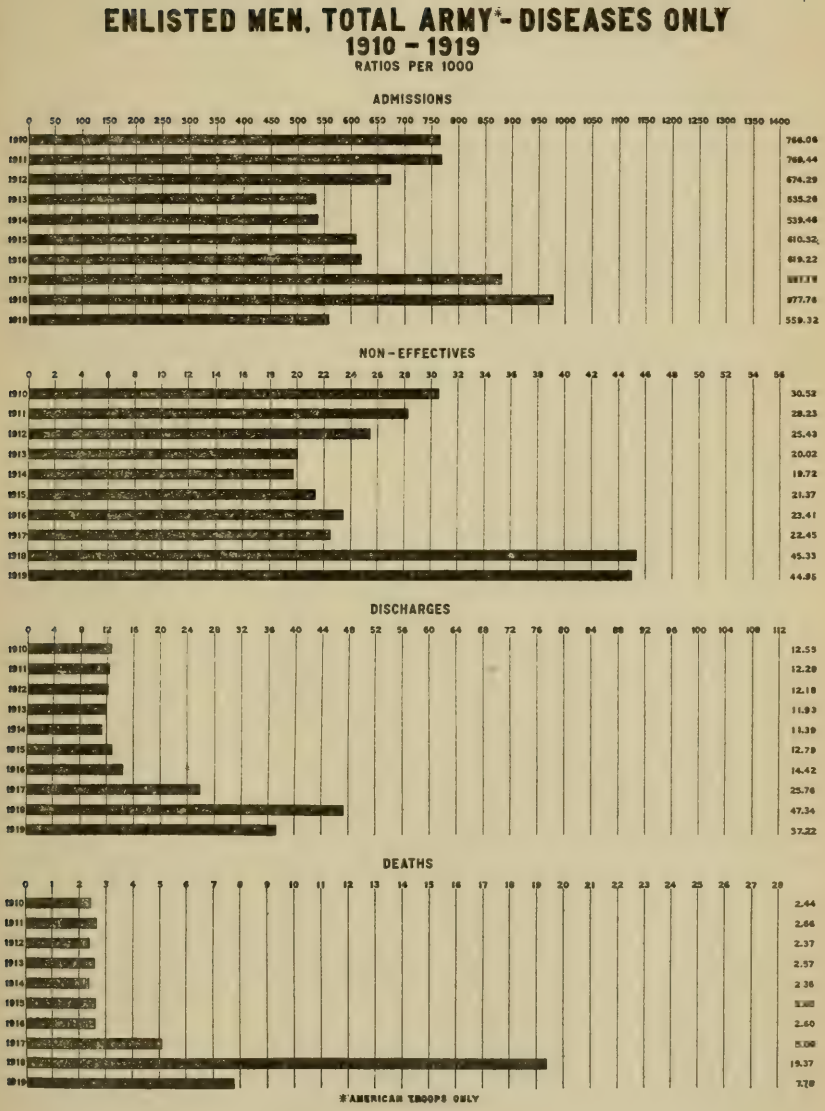

ENLISTED MEN, TOTAL ARMY*- DISEASES ONLY
1910 - 1919
RATIOS PER 1000
ADMISSIONS
0 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100 1150 1200 1250 1300 1350 1400
1910 764.06
1911 768.44
1912 674.29
1913 535.28
1914 539.46
1915 610.52
1916 619.22
1917
1918 977.76
1919 559.32
NON-EFFECTIVES
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56
1910 30.52
1911 28.23
1912 25.43
1913 20.02
1914 19.72
1915 21.37
1916 23.41
1917 22.45
1918 45.33
1919 44.95
DISCHARGES
0 4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96 100 104 108 112
1910 12.59
1911 12.28
1912 12.18
1913 11.93
1914 11.39
1915 12.79
1916 14.42
1917 25.76
1918 47.34
1919 37.22
DEATHS
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
1910 2.44
1911 2.66
1912 2.37
1913 2.57
1914 2.36
1915
1916 2.60
1917
1918 19.37
1919
*AMERICAN TROOPS ONLY

FIG. 17.

demic of 1918, the reporting of all men demobilized with 10 per cent or more disability, and the retaining of all men with tuberculosis and other chronic diseases and injuries in hospitals until the maximum degree of improvement was attained, all tended to materially increase the admission, death, discharge, and noneffective rates for the year.

Admissions.

AMERICAN TROOPS.

Enlisted men in the United States.—The general admission rate for diseases for enlisted men in the United States was 779.56. This rate showed a very material improvement over that for 1918. In fact, it rather closely approached the prewar rate, which, for the 10 years prior to the war, averaged 680.16. Table 48 shows the diseases which stood highest in the list as causes of admission. It will be noted that of the 10, 5 belonged to the respiratory group of diseases, tonsillitis (acute), bronchitis, influenza, pharyngitis, and rhinitis; and 2 belonged to the venereal group, gonococcus infection and syphilis. For the white enlisted men the rate in 1919 was 763.02, as compared with 1,216.47 in 1918; and for the colored it was 950.81, as compared with 2,004.02 in 1918.

Enlisted men in Europe.—The general admission rate for enlisted men in Europe for the year 1919 was 479.46, as compared with 576.72 in 1918. Three of the leading diseases, as shown in Table 48, belonged to the respiratory group, influenza, bronchitis, and tonsillitis (acute). Two of the 10 belonged to the venereal group, gonococcus infection and syphilis.

The rate for the white troops was 436.88 in 1919 and 487.07 in 1918, and that for the colored was 450.01 in 1919 and 831.57 in 1918. The rate for the American forces in Germany was high during the latter part of the year, but as the strength there was then comparatively small the rate could not raise the general rates for the year, since the strength of the entire Army in Europe at the beginning of the year was quite large.

Enlisted men in the Tropics.—For the American troops serving in the Tropics—that is, in the Philippine Islands, Hawaiian Islands, and Panama—the admission rate was quite satisfactory, being only 606.43 per 1,000. Gonococcus infection accounted for nearly one-fifth of the total. Three diseases of the respiratory group are shown in Table 48 as being among the leading 10 causes of admission. The rates for them, however, were lower than the corresponding rates in the United States and in Europe.

Considering the comparative rates for the three countries, that for the Philippine Islands was the highest, being 826.63, as compared with 584.48 in Panama and 579.62 in Hawaii. These figures show a material reduction from those of the preceding year, when they were 1,029.67 for the troops in the Philippines, for those in Hawaii 605.24, and in Panama 946.29. The rate for the white troops in the Philippines was slightly higher than that for the colored, being 832.56, as compared with 811.69. Both of these rates were materially lower than the rates for 1918, when they were 1,039.99 for the white and 994.64 for the colored.

NATIVE OR INSULAR TROOPS.

For the native troops—Filipinos, Hawaiians, and Porto Ricans—the highest admission rate was for the Porto Ricans, 827.92; the second highest was for the Filipinos, 487.52; and the lowest for the Hawaiians (Hawaiians, Japanese, and Chinese), 329.82. All of these figures showed a material reduction from those of the preceding year, when they were: Porto Ricans, 1,501.10; Filipinos, 1,022.74; and Hawaiians, 707.96. For the Porto Ricans the three leading causes of admission, as shown in Table 48, were: Ankylostomiasis, 118.55; bronchitis, 100.38; and malarial fevers, 45.41. For the Filipinos the three leading diseases were: Malarial fevers, 41.12; mumps, 40.75; and bronchitis, 36.82.

It is interesting to note that the rate for malarial fevers for the American troops serving in the Philippine Islands was much lower than that for the Filipinos, being 23.43 for the Americans and 41.12 for the Filipinos.

TABLE 48.—*Admissions, United States Army, leading diseases, 1919—Absolute numbers and ratios per 1,000.*

Diseases.	Number.	Ratio.
ENLISTED MEN, UNITED STATES ARMY, UNITED STATES.		
Tonsillitis, acute	25,681	83.66
Bronchitis	20,500	66.79
Mumps	16,360	53.30
Gonococcus infection	16,246	52.93
Influenza (all)	14,920	48.61
Pharyngitis	9,010	29.35
Syphilis	6,557	21.36
Rhinitis	6,233	20.31
Scabies	5,766	18.78
Hernia	4,127	13.45
Total (all diseases)	239,297	779.56
ENLISTED MEN, UNITED STATES ARMY, EUROPE.		
Influenza (all)	46,971	85.92
Bronchitis	27,252	49.85
Mumps	17,771	32.50
Gonococcus infection	15,587	28.81
Tonsillitis, acute	11,587	21.20
Scabies	9,411	17.22
Syphilis	5,803	10.62
Arthritis	4,516	8.26
Otitis media	4,496	8.22
Appendicitis	4,312	7.89
Total (all diseases)	262,142	479.46
ENLISTED MEN, UNITED STATES ARMY, TROPICS.		
Gonococcus infection	1,526	112.51
Malarial fevers	538	39.67
Bronchitis	457	33.69
Tonsillitis, acute	329	24.26
Influenza (all)	325	23.96
Appendicitis	240	17.70
Syphilis	158	11.65
Alcoholism	144	10.62
Trichophytosis	130	9.59
Abscess	108	7.96
Total (all diseases)	8,225	606.43

Diseases.	Number.	Ratio.
OFFICERS, UNITED STATES ARMY, ALL COUNTRIES.		
Influenza (all)	3,490	62.82
Bronchitis	2,817	50.71
Tonsillitis, acute	1,759	31.66
Gonococcus	969	17.44
Tonsillitis, chronic	847	15.25
Scabies	790	14.22
Pharyngitis, acute	669	12.04
Appendicitis	603	10.96
Hemorrhoids	556	10.01
Hernia	506	9.11
Total (all diseases)	27,654	497.79
NATIVE PHILIPPINE TROOPS, PHILIPPINE ISLANDS.		
Malarial fevers	345	41.12
Mumps	342	40.75
Bronchitis	309	36.82
Influenza (all)	152	18.11
Tuberculosis	129	15.37
Ankylostomiasis	114	13.58
Ascaris lumbricoides	114	13.58
Gonococcus infection	111	13.23
Furuncle	104	12.39
Cestodes	102	2.86
Trichophytosis	102	12.15
Total (all diseases)	4,091	487.52
NATIVE PORTO RICAN TROOPS, PANAMA AND PORTO RICO.		
Ankylostomiasis	248	118.55
Bronchitis	210	100.38
Malarial fevers	95	45.41
Syphilis (all)	86	41.11
Gonococcus infection	77	36.81
Mumps	66	31.55
Abscess	48	22.94
Tonsillitis, acute	41	19.60
Pharyngitis, acute	40	19.12
Enteritis and colitis	34	16.25
Total (all diseases)	1,732	827.92

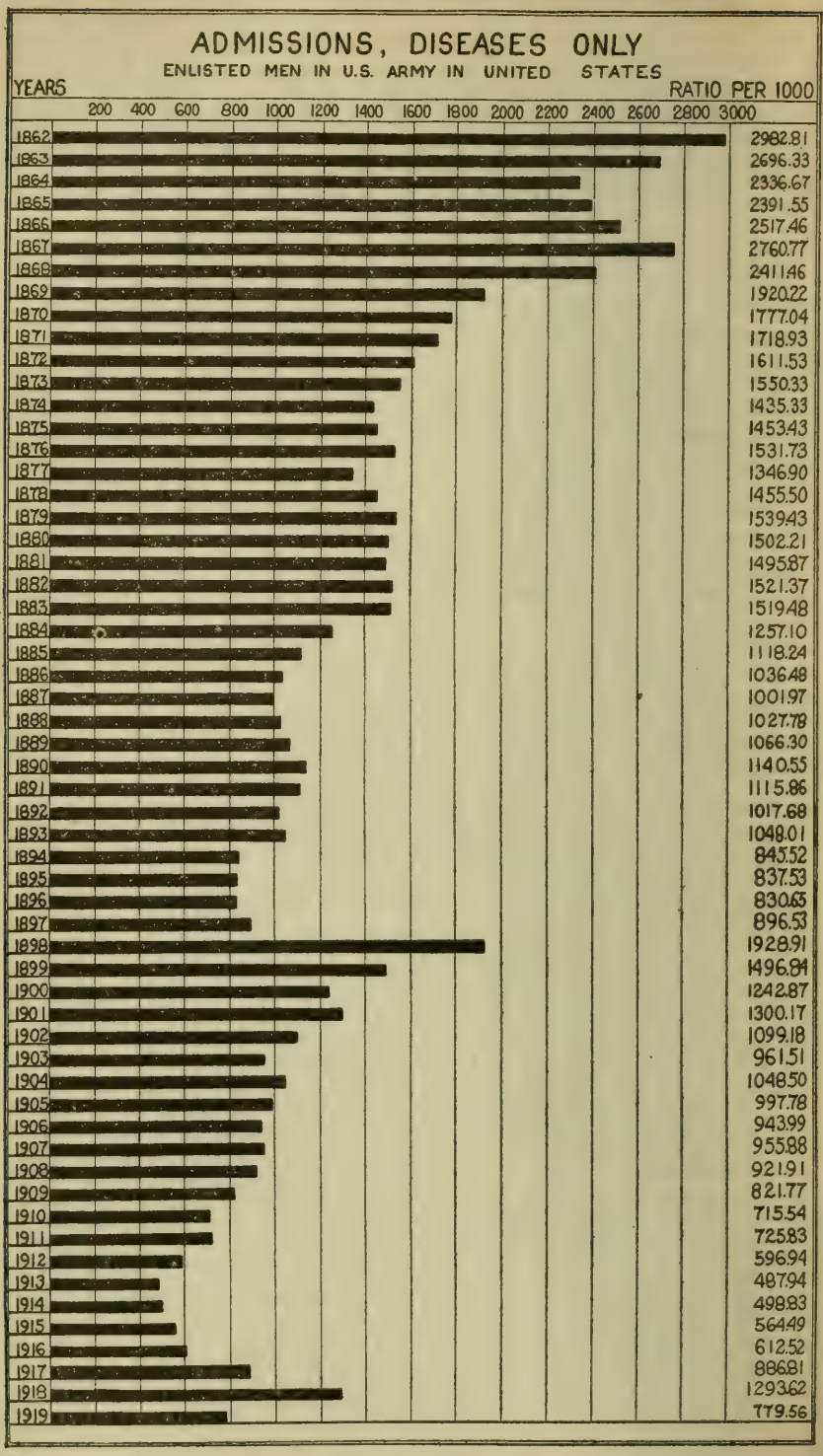
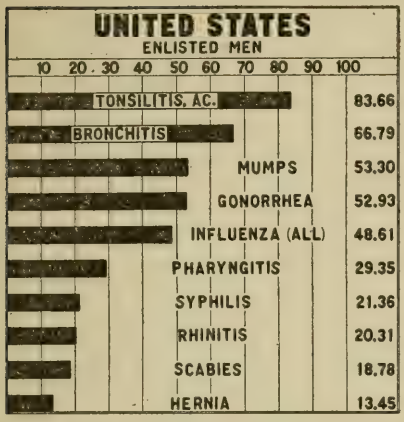
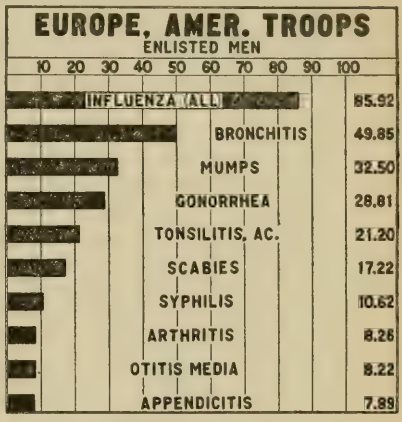
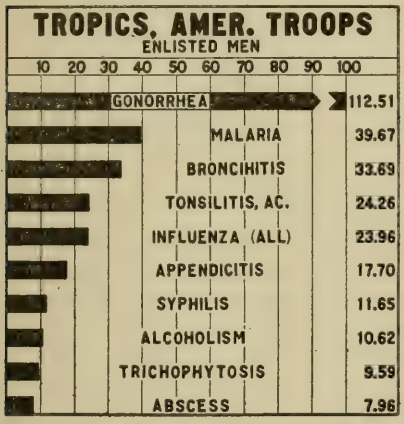

ADMISSIONS, DISEASES ONLY
ENLISTED MEN IN U.S. ARMY IN UNITED STATES
YEARS
RATIO PER 1000
200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000
1862 2982.81
1863 2696.33
1864 2336.67
1865 2391.55
1866 2517.46
1867 2760.77
1868 2411.46
1869 1920.22
1870 1777.04
1871 1718.93
1872 1611.53
1873 1550.33
1874 1435.33
1875 1453.43
1876 1531.73
1877 1346.90
1878 1455.50
1879 1539.43
1880 1502.21
1881 1495.87
1882 1521.37
1883 1519.48
1884 1257.10
1885 1118.24
1886 1036.48
1887 1001.97
1888 1027.78
1889 1066.30
1890 1140.55
1891 1115.86
1892 1017.68
1893 1048.01
1894 845.52
1895 837.53
1896 830.65
1897 896.53
1898 1928.91
1899 1496.84
1900 1242.87
1901 1300.17
1902 1099.18
1903 961.51
1904 1048.50
1905 997.78
1906 943.99
1907 955.88
1908 921.91
1909 821.77
1910 715.54
1911 725.83
1912 596.94
1913 487.94
1914 498.83
1915 564.49
1916 612.52
1917 886.81
1918 1293.62
1919 779.56

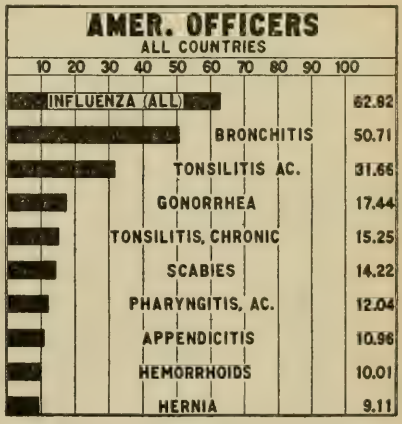
FIG. 18.

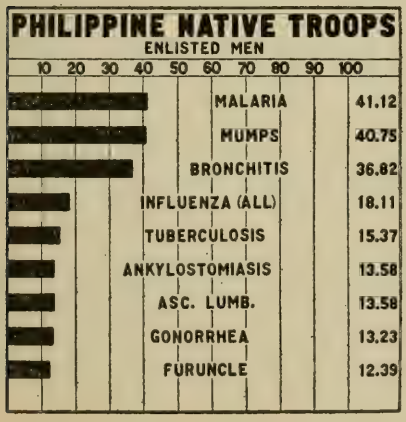
ADMISSIONS
AMERICAN AND NATIVE TROOPS (ALL)
LEADING DISEASES 1919
RATIOS PER 1000











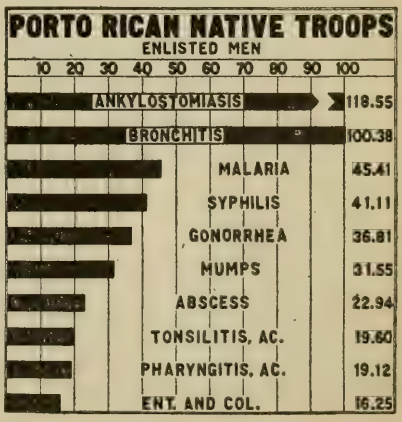


FIG. 19.

Deaths.

AMERICAN TROOPS.

Enlisted men in the United States.—For the year 1919 the death rate for diseases for enlisted men serving in the United States was 8.35. This rate was very much lower than that for the year 1918, 21.93, but higher than that for the year 1917, when it was 5.34, and much above the average rate for the 10 years preceding the war, which was 2.76. A glance at Table 49 will explain the reason for this high death rate. It will be noted that tuberculosis stands at the head of the list, with a rate of 2.20; influenza second, with 1.83; and broncho-pneumonia and lobar pneumonia third and fourth, with the rates, respectively, of 1.14 and 0.79. These four diseases accounted for over 70 per cent of all deaths from disease in the United States. If the total rate for these four is subtracted from the total for all diseases the remaining rate will be only 2.39. If to this remaining rate the combined prewar figures for the four diseases in question are added, the sum would then be no higher than the average prewar rate. As has been mentioned elsewhere, the abnormally high death rate for tuberculosis was due to the retention in the military service of all cases with tuberculosis until the maximum degree of improvement had been attained, or until, under certain conditions, the patients requested their discharge. In 1916, when the prewar policy of early discharge was followed, the total death rate for tuberculosis in the United States for enlisted men was only 0.28.

The death rate for diseases among the colored troops in the United States was 19.60 and among the white 7.26. This high mortality rate for colored troops was due to the large loss from tuberculosis and pneumonia. In 1918 the figures for the whites in the United States was 20.45 and for the Negroes 38.72.

Enlisted men in Europe.—For the enlisted men serving in Europe the death rate was practically the same as that for enlisted men serving in the United States, being 8.33, as compared with 8.35 for the United States. This rate, as was to be expected, showed a material reduction from that for 1918, when it was 16.01. The four diseases that stood at the head of the list as causes of death in the United States also stood at the head of the list in Europe, but with the order changed. In Europe they were: Influenza, 2.00; broncho-pneumonia, 1.80; tuberculosis, 1.43; and lobar pneumonia, 1.27. The mortality from these four diseases accounted for almost 80 per cent of the total deaths from disease in Europe. If these four figures are combined and subtracted from the total death rate the remaining would be only 1.83, an exceptionally small one. As has been mentioned elsewhere, all losses resulting from cases of tuberculosis which became apparent while the men were serving in Europe were charged, as far as practicable, to Europe, even though the deaths actually occurred in the United States.

The rate for the colored troops was more than twice as high as that for the white, being 14.18, as compared with 6.55. In 1918 the figure for the colored was 29.34, and for the white 12.16. As in the United States, the reason for the high colored mortality rate was the large number of deaths occurring among those troops as the result of pneumonias and tuberculosis.

Enlisted men in the Tropics.—For the American troops serving in the Tropics the death rate was low, being only 2.36 per 1,000. Dysentery, lobar pneumonia, appendicitis, and broncho-pneumonia stood at the head of the list (see Table 49). The rate was highest for troops serving in the Philippines, being 3.32; second, in Hawaii, 2.23; and third, in Panama, 1.40. For troops serving in the Philippines and Panama the rates showed a decided decrease from those of the preceding year, when they were, in the Philippines 4.34 and in Panama 3.02. For American troops serving in Hawaii there was a decided increase, the rate being only 1.24 in 1918.

NATIVE TROOPS.

For the native troops the death rate for the Porto Ricans was the highest, being 4.30; for the Hawaiians it was second, 3.84; and for the Filipinos lowest, 3.81. All of these showed a decided decrease from those of the preceding year, when it was, for the Filipinos, 13.21; for the Hawaiians, 4.60; and for the Porto Ricans, 13.65. Only four diseases caused more than one death among the native troops in the Philippines—tuberculosis, lobar pneumonia, cholera, and dysentery—and only one disease caused more than a single death among the Porto Ricans, namely, tuberculosis.

TABLE 49.—*Deaths, United States Army, leading diseases 1919—Absolute numbers and ratios per 1,000.*

Diseases.	Number.	Ratio.
ENLISTED MEN, UNITED STATES ARMY, UNITED STATES.		
Tuberculosis	674	2.20
Influenza (all)	561	1.83
Broncho-pneumonia	351	1.14
Lobar pneumonia	244	.79
Meningitis	74	.24
Appendicitis	47	.15
Nephritis	42	.13
Measles	38	.12
Tonsillitis, acute	36	.12
Cancer	31	.10
Total (all diseases)	2,562	8.35
ENLISTED MEN, UNITED STATES ARMY, EUROPE.		
Influenza (all)	1,092	2.00
Broncho-pneumonia	984	1.80
Tuberculosis	781	1.43
Lobar pneumonia	695	1.27
Meningitis	245	.45
Pneumonia (unclassified)	68	.12
Nephritis	59	.11
Typhoid fever	59	.11
Appendicitis	56	.10
Meningitis, simple	42	.08
Pleurisy, suppurative	27	.05
Total (all diseases)	4,565	8.33
ENLISTED MEN, UNITED STATES ARMY, TROPICS.		
Dysentery	4	.29
Lobar pneumonia	4	.29
Appendicitis	3	.22
Broncho-pneumonia	3	.22
Abscess	2	.14
Cholera	2	.14
Influenza (all)	2	.14
Malarial fevers	2	.14
Nephritis	2	0.14
Tuberculosis	2	.14
Total (all diseases)	32	2.36
OFFICERS, UNITED STATES ARMY, ALL COUNTRIES.		
Influenza	78	1.40
Lobar pneumonia	40	.72
Tuberculosis	27	.49
Pneumonia (unclassified)	24	.43
Meningitis	13	.23
Broncho-pneumonia	12	.22
Appendicitis	11	.20
Nephritis	11	.20
Cancer	7	.13
Myocarditis	5	.09
Tonsillitis, acute	4	.07
Total (all diseases)	311	5.60
NATIVE PHILIPPINE TROOPS, PHILIPPINE ISLANDS.		
Tuberculosis	8	.95
Lobar pneumonia	6	.72
Cholera	5	.60
Dysentery	2	.24
Other, separate causes	11	.....
Total (all diseases)	32	3.81
NATIVE PORTO RICAN TROOPS, PANAMA AND PORTO RICO.		
Tuberculosis	2	.96
Other, separate causes	7	.....
Total (all diseases)	9	4.30

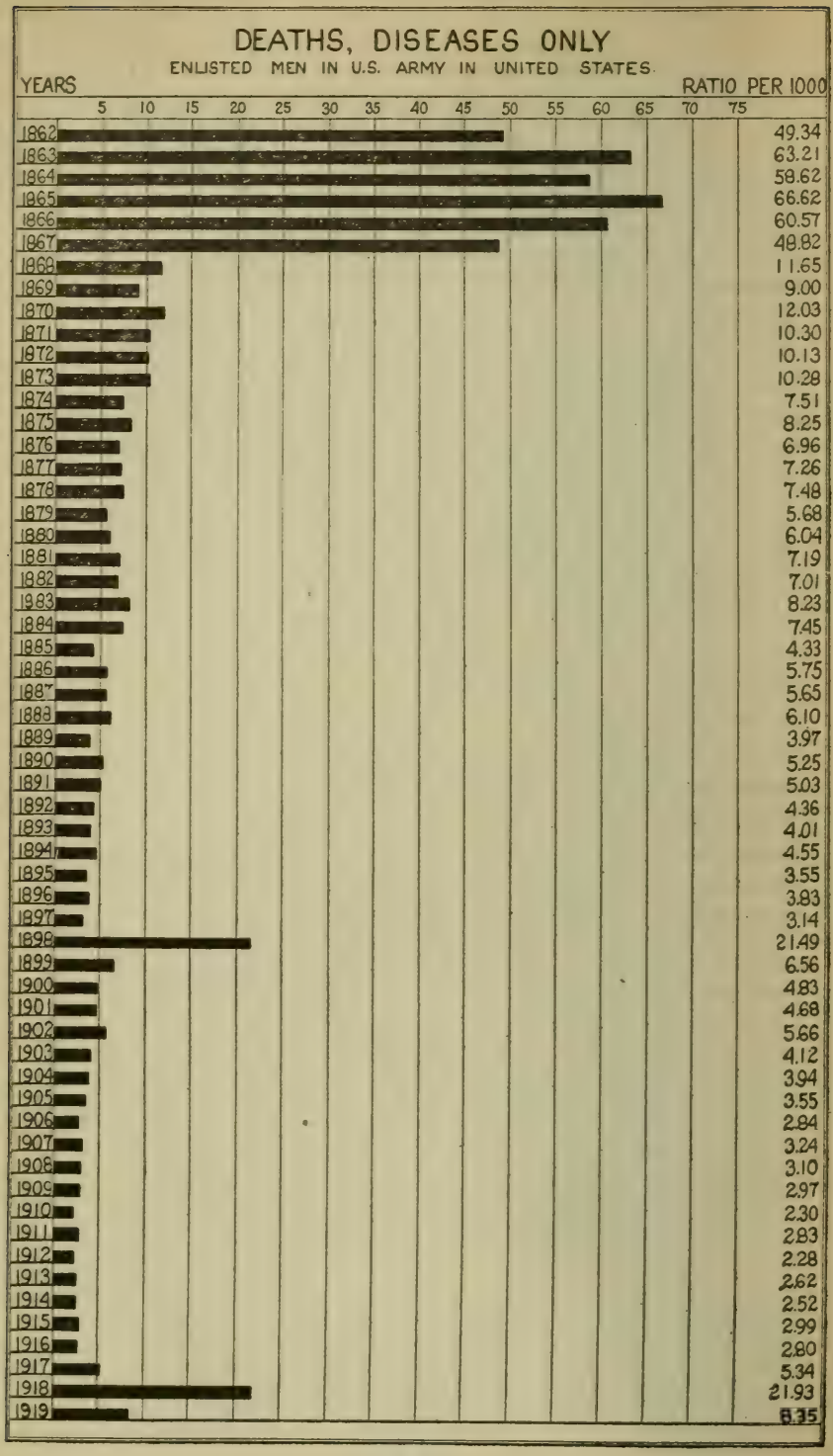

DEATHS, DISEASES ONLY
ENLISTED MEN IN U.S. ARMY IN UNITED STATES.
YEARS
RATIO PER 1000
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
1862 49.34
1863 63.21
1864 58.62
1865 66.62
1866 60.57
1867 48.82
1868 11.65
1869 9.00
1870 12.03
1871 10.30
1872 10.13
1873 10.28
1874 7.51
1875 8.25
1876 6.96
1877 7.26
1878 7.48
1879 5.68
1880 6.04
1881 7.19
1882 7.01
1883 8.23
1884 7.45
1885 4.33
1886 5.75
1887 5.65
1888 6.10
1889 3.97
1890 5.25
1891 5.03
1892 4.36
1893 4.01
1894 4.55
1895 3.55
1896 3.83
1897 3.14
1898 21.49
1899 6.56
1900 4.83
1901 4.68
1902 5.66
1903 4.12
1904 3.94
1905 3.55
1906 2.84
1907 3.24
1908 3.10
1909 2.97
1910 2.30
1911 2.83
1912 2.28
1913 2.62
1914 2.52
1915 2.99
1916 2.80
1917 5.34
1918 21.93
1919 8.35

FIG. 20.

DEATHS
AMERICAN AND NATIVE TROOPS (ALL)
LEADING DISEASES 1919
RATIOS PER 1000

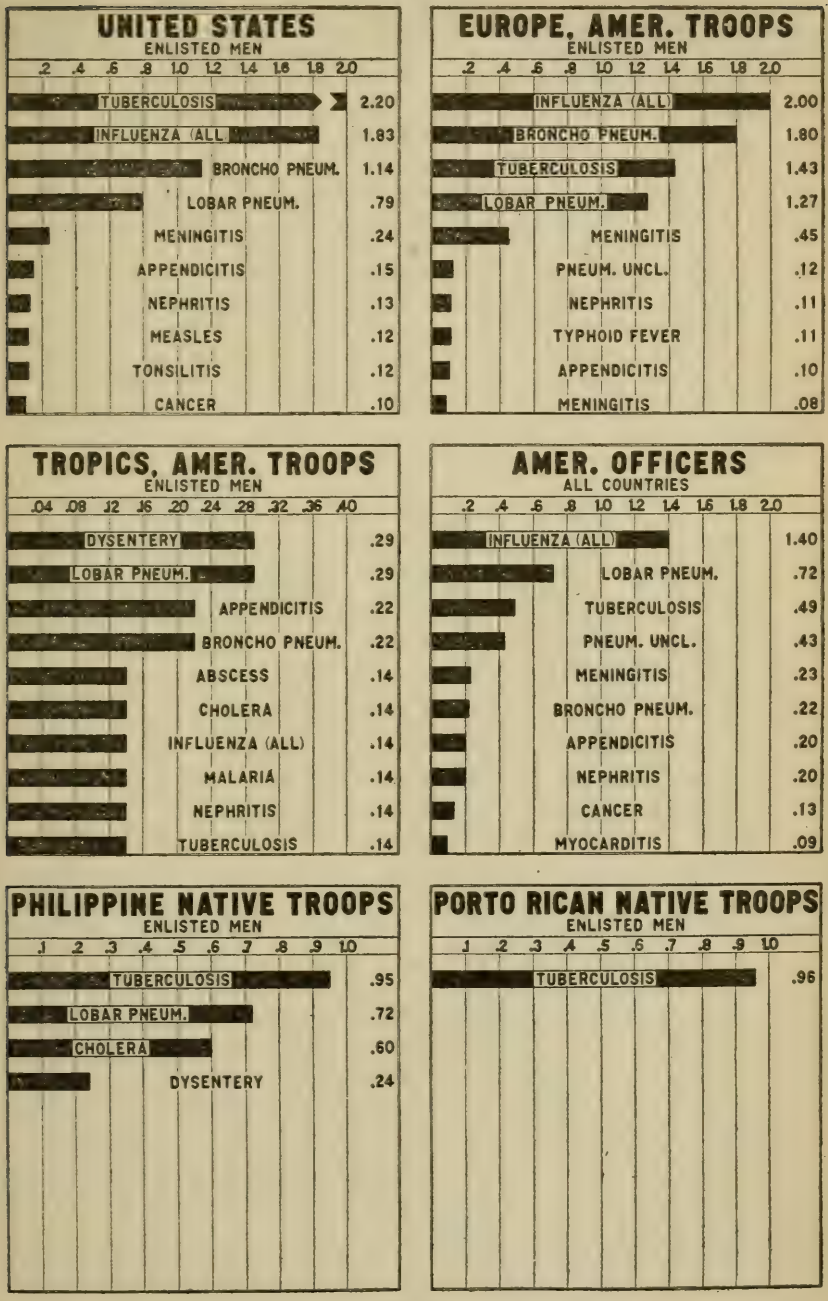


FIG. 21.

Discharges.

It is difficult to compare the discharge rates for 1919, especially for the troops serving in the United States, with any rates for any preceding years other than for 1918. As a result of military necessity, examinations in 1918 were hastily conducted and many selective service men were inducted into the Army who subsequently had to be discharged as physically unfit for military service. During the latter part of 1918 and a large part of 1919 the war Army was being demobilized in the United States. As mentioned elsewhere, all soldiers who upon physical examination were found to have 10 per cent or more disability were reported to the Bureau of War Risk Insurance as prospective beneficiaries. The regulations required that such instances be reported also to this office. All so reported were considered as cases discharged on certificate of disability. It is needless to state that many were discharged with 10 per cent or more disability who would not ordinarily have been considered as unfit for military service, and, furthermore, as the result of so many extremely careful physical examinations, many disabilities were detected which would ordinarily have escaped detection for a time at least.

AMERICAN TROOPS.

Enlisted men in the United States.—The discharge rate for diseases for enlisted men serving in the United States in 1919 was 77.58, which was slightly lower than that for 1918, when it was 84.68. It was, however, much higher than the figure for any year preceding 1918 since the year 1863. Tuberculosis, valvular diseases of the heart, pes planus, and dementia precox stood at the head of the list, the rates being, respectively, 15.23, 4.63, 3.94, and 3.49.

For the white troops the rate was 77.69 and for the colored 76.49. In 1918 for the white troops it had been 62.42 and for the colored 175.12. It is apparent that the figure for the white troops was higher in 1919 than it was in 1918, but that the rate for the colored troops was less than half as high as that for the preceding year.

In 1918 the colored troops had a discharge rate for venereal diseases alone of 44.97.

Enlisted men in Europe.—For enlisted men serving in Europe the discharge rate for diseases in 1919 was 17.78, as compared with 1.24 in 1918. The reason for this great difference was propably that there were many discharged in 1919 who were returned to the United States as unfit for military service during the latter part of 1918. As the majority of the troops were sent over in the spring, summer, and fall of 1919, there had not been sufficient time for eliminating the unfit and returning them to the United States in time to discharge them because of disability before the end of the calendar year 1918.

As in the United States, tuberculosis was the leading cause for discharge, the rate being 2.69 per 1,000; dementia precox stood second, 1.31; valvular diseases of the heart third, 1.11; and mental deficiency fourth, 0.89. The discharge rate for white troops was 17.85, and for the colored 14.95.

Enlisted men in the Tropics.—The discharge rate for disease among enlisted men serving in the Tropics during 1919 was 10.47 per 1,000. Here again tuberculosis stood at the head of the list, with a rate of

2.29; pes planus stood second, 1.70; dementia precox third, 0.81; and constitutional psychopathic states fourth, 0.59. The highest rate was for troops serving in Hawaii, 18.47; second, for troops in the Philippines, 8.30; and third, for troops in Panama, 7.80. In the Philippines the discharge rate for the white troops was higher than that for the colored, being 8.76, as compared with 7.14. In 1918 the discharge rate in Hawaii was 6.20, in the Philippines 3.52, and in Panama 5.19.

NATIVE TROOPS.

For the insular troops the discharge rate for the mixed Hawaiian troops was the highest, it being 36.43; the Filipinos stood second, with 21.69; and the Porto Ricans third, with 18.64. In 1918 the rates were, in the order named, 42.25, 24.74, and 26.08. For the native Philippine troops tuberculosis alone caused the discharge of 149 out of a total of 182, and for the Porto Ricans 15 out of 39.

TABLE 50.—*Discharges, United States Army, leading diseases, 1919—Absolute numbers and ratios per 1,000.*

Diseases.	Number.	Ratio.
ENLISTED MEN, UNITED STATES ARMY, UNITED STATES.		
Tuberculosis	4,676	15.23
Valvular diseases of the heart	1,420	4.63
Pes planus	1,209	3.94
Dementia praecox	1,072	3.49
Arthritis	872	2.71
Otitis media	812	2.65
Mental deficiency	789	2.57
Hernia	539	1.76
Constitutional psychopathic state	483	1.57
Bronchitis	482	1.57
Total (all diseases)	23,815	77.58
ENLISTED MEN, UNITED STATES ARMY, EUROPE.		
Tuberculosis	1,472	2.69
Dementia praecox	718	1.31
Valvular diseases of the heart	605	1.11
Mental deficiency	484	.89
Nephritis	370	.68
Otitis media	357	.65
Arthritis	348	.64
Epilepsy	292	.53
Constitutional psychopathic state	277	.51
Psychosis manic depressive	277	.51
Pes planus	276	.50
Total (all diseases)	9,721	17.78
ENLISTED MEN, UNITED STATES ARMY, TROPICS.		
Tuberculosis	31	2.29
Pes planus	23	1.70
Dementia praecox	11	.81
Constitutional psychopathic state	8	.59
Mental deficiency	7	.52
Valvular diseases of the heart	6	.44
Asthma	3	.22
Otitis media	3	.22
Appendicitis	2	.15
Epilepsy	2	.15
Gonococcus infection	2	.15
Nephritis	2	0.15
Nephrolithiasis	2	.15
Psychosis, alcoholic	2	.15
Psychosis, others	2	.15
Total (all diseases)	142	10.47
OFFICERS, UNITED STATES ARMY, ALL COUNTRIES.		
Tuberculosis	146	2.63
Otitis media	77	1.39
Valvular diseases of the heart	62	1.12
Arthritis	58	1.04
Bronchitis	47	.85
Neurasthenia	33	.59
Defective hearing	24	.43
Hernia	23	.41
Pes planus	20	.36
Influenza	16	.29
Sinusitis	16	.29
Varicose veins	16	.29
Total (all diseases)	952	17.14
NATIVE PHILIPPINE TROOPS, PHILIPPINE ISLANDS.		
Tuberculosis	149	17.76
Dementia praecox	8	.95
Valvular diseases of the heart	8	.95
Asthma	2	.12
Gonococcus infection	2	.12
Mental deficiency	2	.12
Total (all diseases)	182	21.69
NATIVE PORTO RICAN TROOPS, PANAMA AND PORTO RICO.		
Tuberculosis	15	7.17
Beriberi	7	3.35
Valvular diseases of the heart	5	2.39
Asthma	2	.96
Total (all diseases)	39	18.64

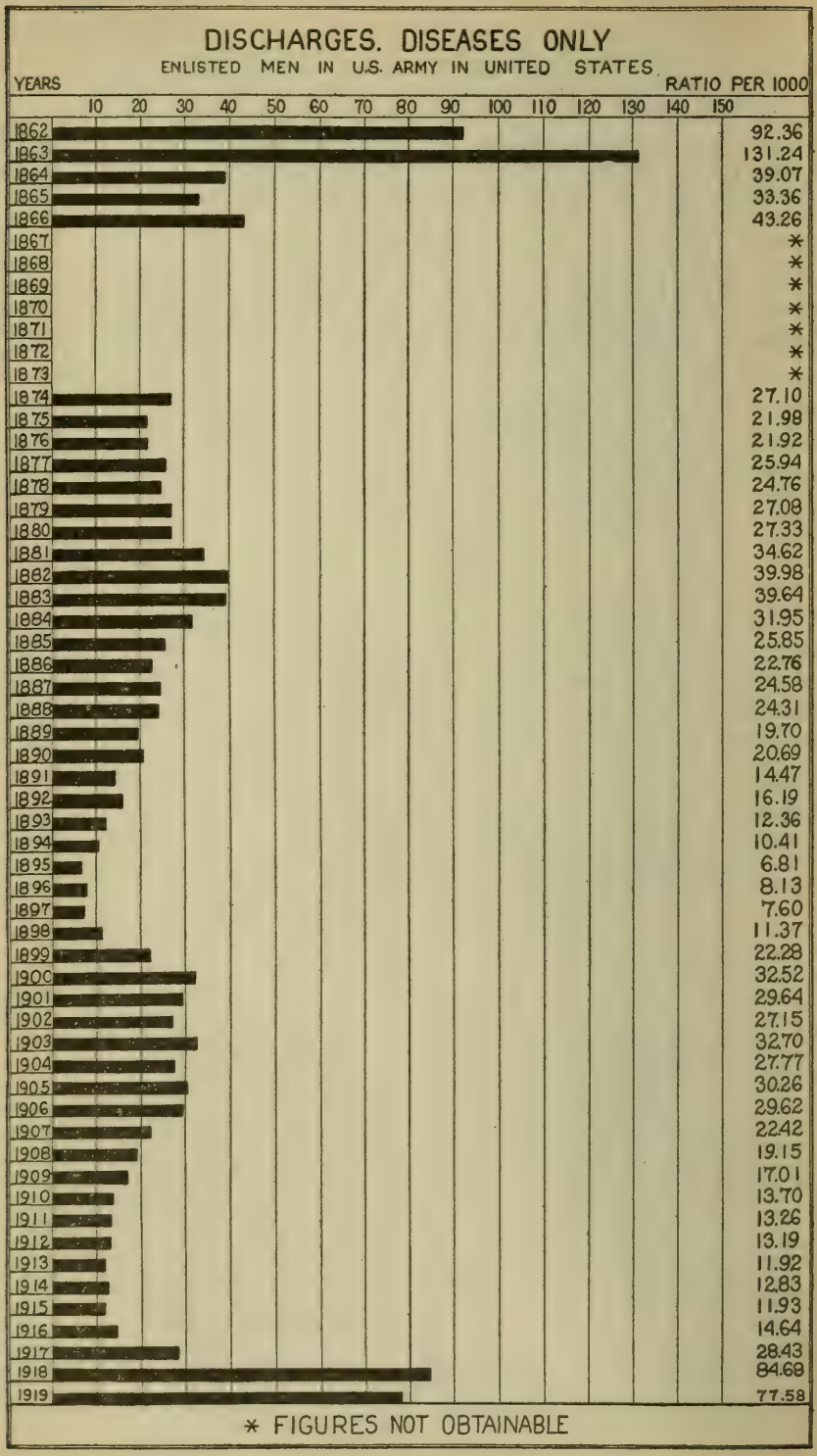
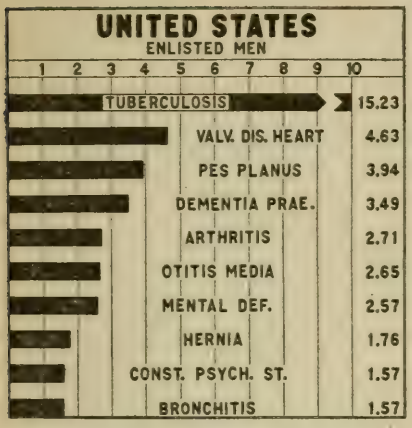
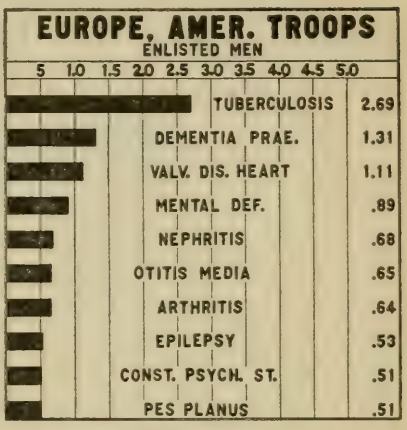
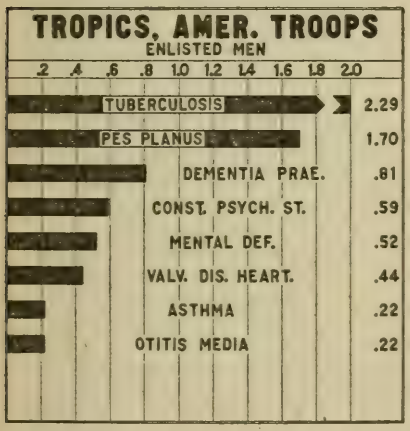

DISCHARGES. DISEASES ONLY
ENLISTED MEN IN U.S. ARMY IN UNITED STATES.
YEARS
RATIO PER 1000
10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
1862 92.36
1863 131.24
1864 39.07
1865 33.36
1866 43.26
1867 *
1868 *
1869 *
1870 *
1871 *
1872 *
1873 *
1874 27.10
1875 21.98
1876 21.92
1877 25.94
1878 24.76
1879 27.08
1880 27.33
1881 34.62
1882 39.98
1883 39.64
1884 31.95
1885 25.85
1886 22.76
1887 24.58
1888 24.31
1889 19.70
1890 20.69
1891 14.47
1892 16.19
1893 12.36
1894 10.41
1895 6.81
1896 8.13
1897 7.60
1898 11.37
1899 22.28
1900 32.52
1901 29.64
1902 27.15
1903 32.70
1904 27.77
1905 30.26
1906 29.62
1907 22.42
1908 19.15
1909 17.01
1910 13.70
1911 13.26
1912 13.19
1913 11.92
1914 12.83
1915 11.93
1916 14.64
1917 28.43
1918 84.69
1919 77.58
* FIGURES NOT OBTAINABLE

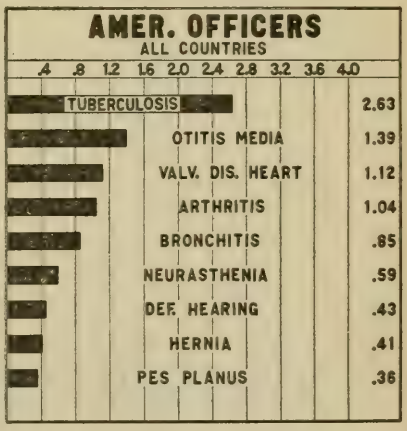
FIG. 22.

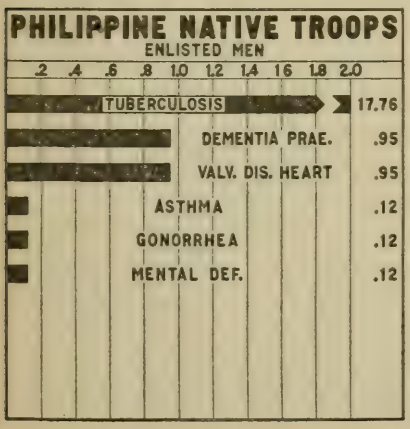
DISCHARGES
AMERICAN AND NATIVE TROOPS (ALL)
LEADING DISEASES 1919
RATIOS PER 1000











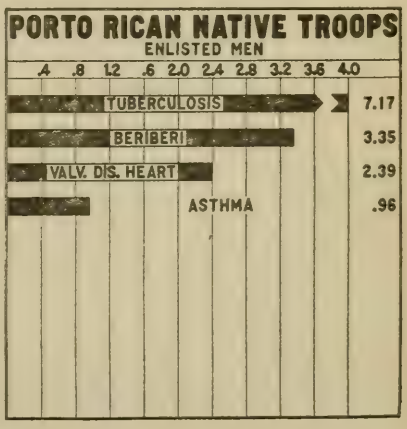


FIG. 23.

Days Lost or Noneffective Rate.

AMERICAN TROOPS.

The total number of days lost for enlisted men serving in the United States during 1919 amounted to 6,479,889. This gave a noneffective rate of 57.83, which was higher even than the rate of 51.88 for the year 1918. The only noneffective rate recorded for troops in the United States which was higher than that for 1919 occurred in the year 1868, which was the first year for which such rates are recorded, when it was 58.10. The high rates shown (see fig. 22) for 1898 and 1899 were for the Army and not for the United States alone. An examination of table 51 will explain, at least to a certain extent, why this rate in 1919 was so high. Tuberculosis alone accounted for nearly one-fifth of the days lost, or 1,129,086. The reason for this enormous loss of time from tuberculosis was, as has been explained elsewhere, due to the retaining of patients with this disease in the military service, to attain the maximum degree of improvement. Gonorrhea accounted for 462,238 days and influenza for 382,521 days.

For the white enlisted men the rate was 55.80 and for colored it was 78.94. In 1918 the rate for the white troops was 49.42 and for the colored 79.72.

Enlisted men in Europe.—For enlisted men serving in Europe the noneffective rate was also high, it being 42.28; the total days lost amounted to 8,437,111. In 1918 the rate was 38.17. Table 51 shows that influenza, bronchitis, and tuberculosis stood at the head of the list, with figures of 4.92, 3.21, and 2.78, respectively. The rate was slightly higher for the colored than that for the white, it being 41.83, as compared with 39.39. In 1918 the rate for the colored was 53.06 and for the white 34.48.

Enlisted men in the Tropics.—The noneffective rate for the year for American troops serving in the Tropics was 31.83. Gonococcus infection stood at the head of the list, as it did for admissions, with a rate of 4.89. After this disease tuberculosis, appendicitis, malarial fevers, and bronchitis stood in the order named, with rates of 1.90, 1.44, 1.20, and 1.05. The figures were highest for troops serving in the Philippines, 39.17; second in Hawaii, 33.59; and third in Panama, 22.81. In 1918 these rates were for troops in the Philippine Islands, 42.80; in Hawaii, 21.43; and in Panama, 28.15. In the Philippines the rate for the white troops was higher than that for the colored, it being 40.76 as compared with 35.19.

NATIVE TROOPS.

For the native troops the Porto Ricans had the highest noneffective rate, 29.74; the mixed Hawaiians the second, 16.59; and the native Philippine troops the third, 15.26. These figures in 1918 were: Porto Rico, 44.10; Hawaii, 20.93; native Philippine troops, 29.65. It is apparent that for these troops the rates showed a material improvement over those for the preceding year. For the Filipinos tuberculosis, mumps, malarial fevers, and gonococcus infection were the diseases standing at the head of the list, with rates of 1.52, 1.30, 1.18, and 1.04. For the native Poto Rican troops the diseases standing at the head of the list were: Syphilis, bronchitis, tuberculosis, and beriberi, the figures being, respectively, 2.88, 2.45, 2.09, and 2.03.

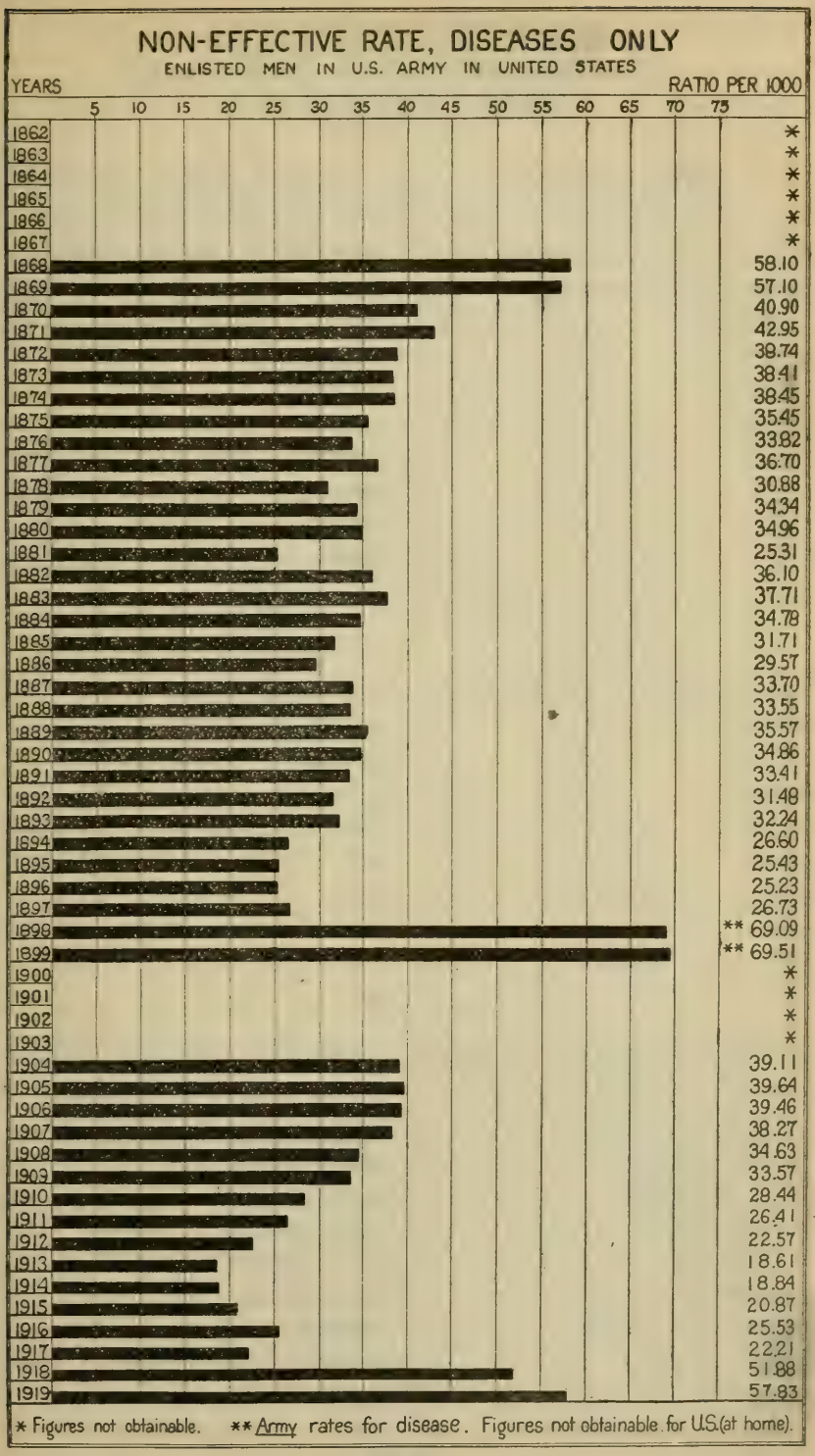

NON-EFFECTIVE RATE, DISEASES ONLY
ENLISTED MEN IN U.S. ARMY IN UNITED STATES
YEARS
RATIO PER 1000
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
1862 *
1863 *
1864 *
1865 *
1866 *
1867 *
1868 58.10
1869 57.10
1870 40.90
1871 42.95
1872 39.74
1873 38.41
1874 38.45
1875 35.45
1876 33.82
1877 36.70
1878 30.88
1879 34.34
1880 34.96
1881 25.31
1882 36.10
1883 37.71
1884 34.78
1885 31.71
1886 29.57
1887 33.70
1888 33.55
1889 35.57
1890 34.86
1891 33.41
1892 31.48
1893 32.24
1894 26.60
1895 25.43
1896 25.23
1897 26.73
1898 ** 69.09
1899 ** 69.51
1900 *
1901 *
1902 *
1903 *
1904 39.11
1905 39.64
1906 39.46
1907 38.27
1908 34.63
1909 33.57
1910 28.44
1911 26.41
1912 22.57
1913 18.61
1914 18.84
1915 20.87
1916 25.53
1917 22.21
1918 51.88
1919 57.83
* Figures not obtainable. ** Army rates for disease. Figures not obtainable for U.S.(at home).

FIG. 24.

NON-EFFECTIVE RATES
AMERICAN AND NATIVE TROOPS (ALL)
LEADING DISEASES 1919
RATIOS PER 1000

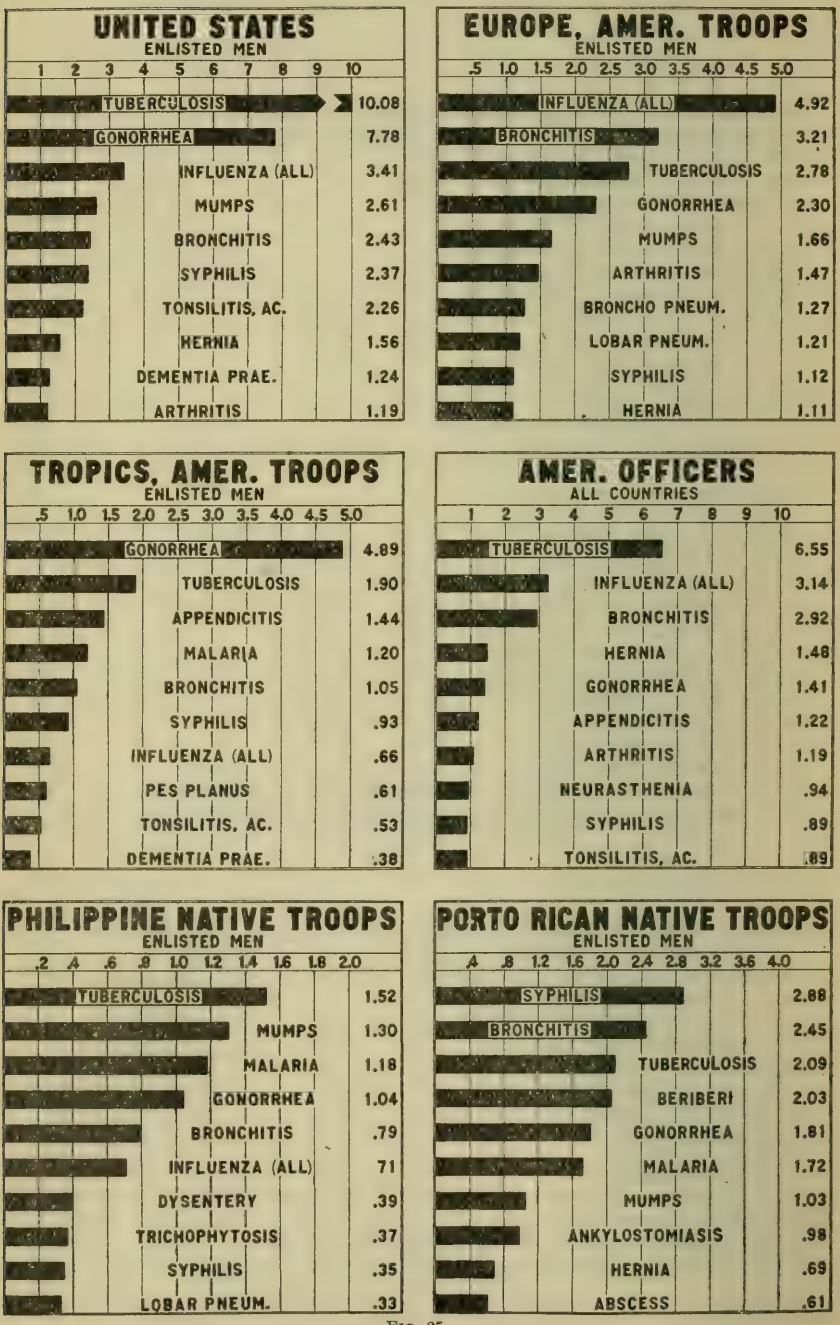


FIG. 25.

TABLE 51.—*Days lost, United States Army, leading diseases, 1919—Absolute numbers and noneffective rates per 1,000.*

Diseases.	Number.	Ratio.	Diseases.	Number.	Ratio.
ENLISTED MEN, UNITED STATES ARMY, UNITED STATES.			OFFICERS, UNITED STATES ARMY, ALL COUNTRIES.		
Tuberculosis	1,129,086	10.08	Tuberculosis	132,773	6.55
Gonococcus infection	462,238	7.78	Influenza (all)	63,659	3.14
Influenza (all)	382,521	3.41	Bronchitis	59,259	2.92
Mumps	292,754	2.61	Hernia	29,950	1.48
Bronchitis	272,442	2.43	Gonococcus infection	28,597	1.41
Syphilis	265,145	2.37	Appendicitis	24,664	1.22
Tonsillitis, acute	253,564	2.26	Arthritis	24,166	1.19
Hernia	175,209	1.56	Neurasthenia	19,149	.94
Dementia praecox	139,138	1.24	Syphilis	18,107	.89+
Arthritis	133,471	1.19	Tonsillitis, acute	17,978	.89—
Total (all diseases)	6,479,889	57.83	Total (all diseases)	862,212	42.53
ENLISTED MEN, UNITED STATES ARMY, EUROPE.			NATIVE PHILIPPINE TROOPS, PHILIPPINE ISLANDS.		
Influenza (all)	982,095	4.92	Tuberculosis	4,970	1.52
Bronchitis	641,347	3.21	Mumps	4,239	1.30
Tuberculosis	554,343	2.78	Malarial fevers	3,867	1.18
Gonococcus infection	459,368	2.30	Gonococcus infection	3,406	1.04
Mumps	330,931	1.66	Bronchitis	2,591	.79
Arthritis	293,719	1.47	Influenza (all)	2,316	.71
Broncho-pneumonia	253,736	1.27	Dysentery	1,270	.39
Lobar pneumonia	240,443	1.21	Trichophytosis	1,194	.37
Syphilis	224,268	1.12	Syphilis	1,141	.35
Hernia	221,999	1.11	Lobar pneumonia	1,072	.33
Total (all diseases)	8,437,111	42.28	Total (all diseases)	49,812	15.26
ENLISTED MEN, UNITED STATES ARMY, TROPICS.			NATIVE PORTO RICAN TROOPS, PANAMA AND PORTO RICO.		
Gonococcus infection	24,225	4.89	Syphilis	2,201	2.88
Tuberculosis	9,397	1.90	Bronchitis	1,870	2.45
Appendicitis	7,107	1.44	Tuberculosis	1,599	2.09
Malarial fevers	5,021	1.20	Beriberi	1,550	2.03
Bronchitis	5,188	1.05	Gonococcus infection	1,379	1.81
Syphilis	4,627	.93	Malarial fevers	1,315	1.72
Influenza	3,285	.66	Mumps	785	1.03
Pes planus	3,004	.61	Ankylostomiasis	751	.98
Tonsillitis, acute	2,600	.53	Hernia	528	.69
Dementia praecox	1,902	.38	Abscess	462	.61
Total (all diseases)	157,662	31.83	Total (all diseases)	22,706	29.74

INFLUENCE OF SEASON.

UNITED STATES.

For enlisted men serving in the United States the highest admission rate for the year was in January, 993.52 per 1,000. This high figure was due to the receding 1918 influenza epidemic. The lowest rate was in the month of November, 610.65. For discharges the maximum rate was during the height of demobilization in June. The lowest rate, other than December, which is as yet incomplete, was in November, 7.22. The greatest death rate was in January, which was affected, like the admission rate, by the receding 1918 influenza epidemic. After this month there was a decided decrease in the death rate throughout the year. The lowest figure other than that for December was for November, 1.53. As for admissions and deaths, so also for days lost, the highest rate was for January, 48.74, and the lowest rate other than that for December was for November, 26.80.

Europe.

For enlisted men serving in Europe the maximum admission rates occurred during the latter part of the year. This was due largely to the filling of the ranks of the Army of Occupation in Germany with recruits. The highest rate for any month was that for September,

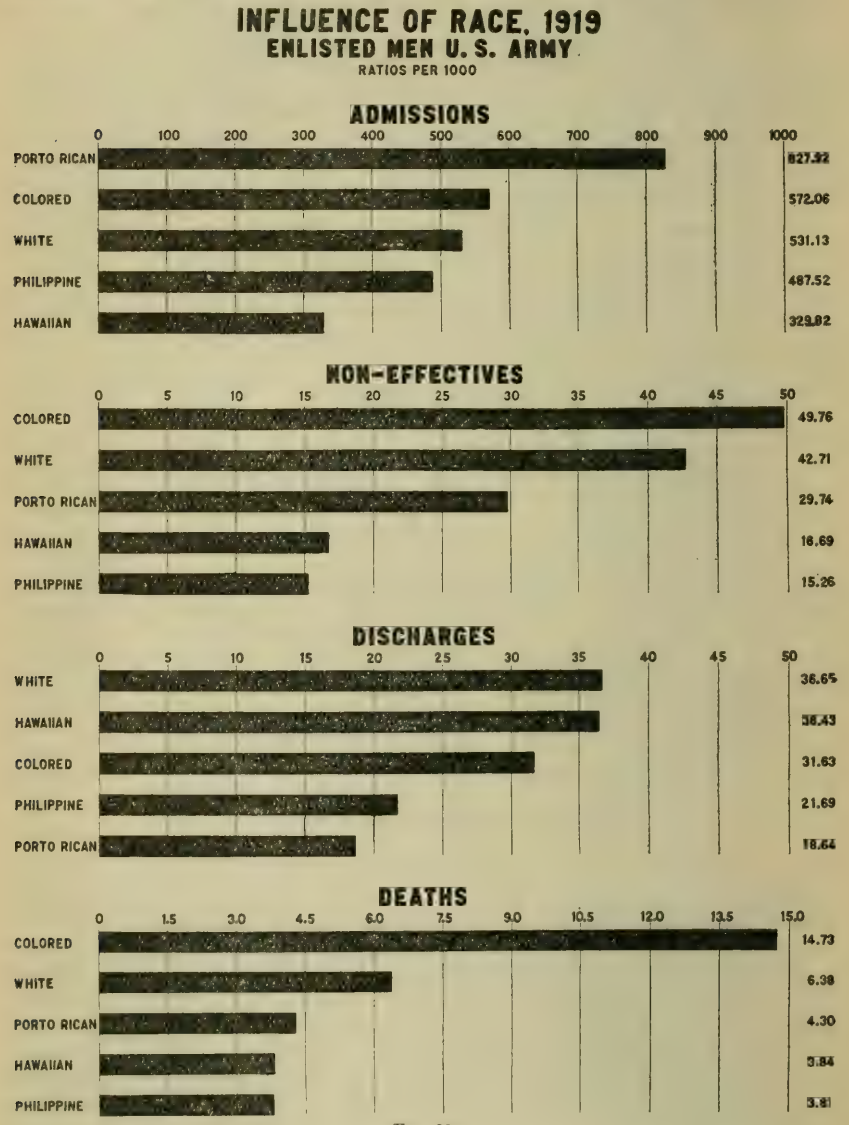


FIG. 26.

1,598.71. For deaths the crest was reached in February, when there was a recrudescence of the 1918 influenza epidemic, the rate being 12.98. The lowest death rate was in October, 1.13. For discharges the highest rate occurred in August, 12.54, and the lowest, other than that for December, was during November, 3.16. For days lost the highest figure was in September, 84.63, and the lowest in May, 16.49.

MOVEMENT OF SICK BY MONTHS, U. S. AND EUROPE

ENLISTED MEN ONLY, 1919

(NOT INCLUDING REMAINING CASES 1918)

RATIOS PER 1000

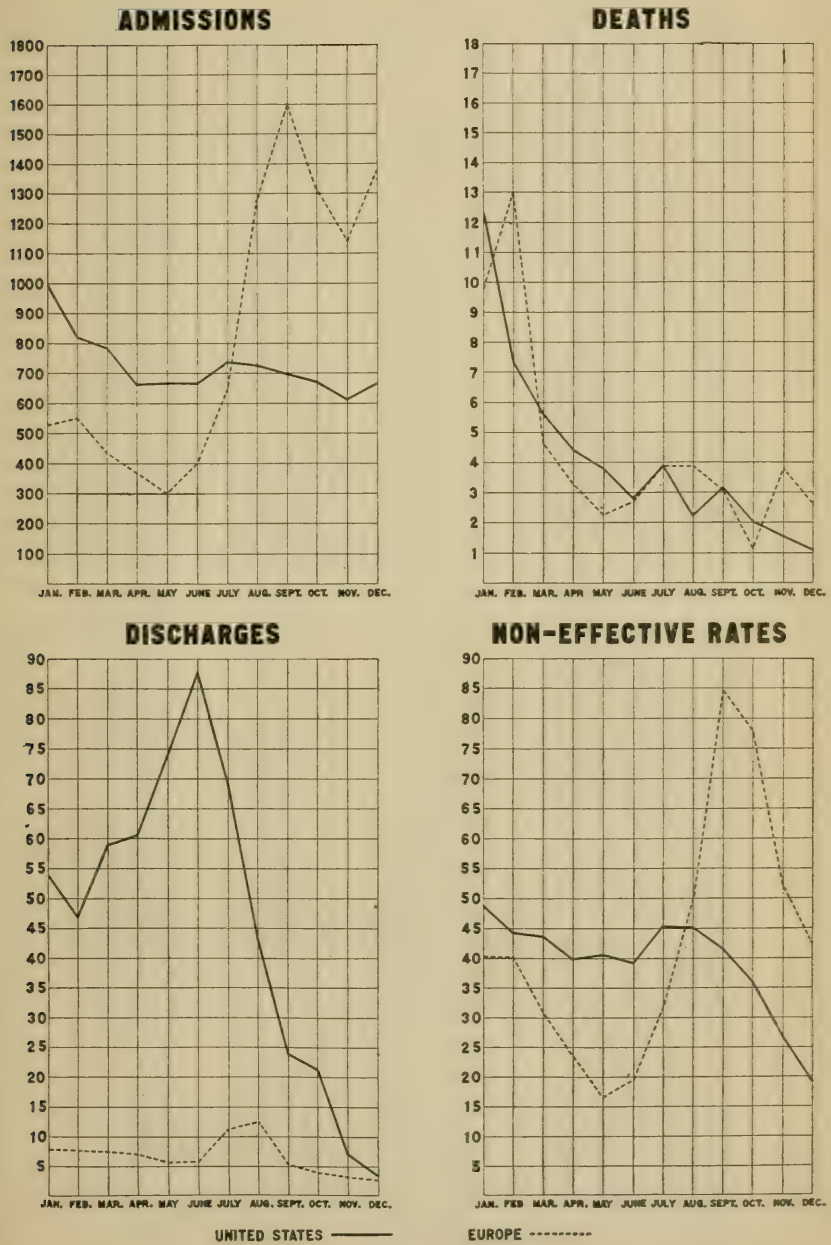


FIG. 27.

TABLE 52.—*Camps and States of occurrence, diseases only (excluding discharges, deaths, and days lost from cases remaining from 1918), enlisted men in the United States—Absolute numbers.*

ADMISSIONS, 1919.

	From remaining cases, 1918.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Not stated.	Total, 1919.	Grand total.
Camps of occurrence	.....	34,980	19,160	14,324	10,152	8,825	7,033	6,878	3,370	3,052	2,640	2,300	2,688	248	115,650	.....
States of occurrence	.....	26,393	17,581	15,135	10,228	8,537	7,702	7,528	7,181	6,302	5,686	4,885	5,301	1,188	123,647	.....
Total	.....	61,373	36,741	29,459	20,380	17,362	14,735	14,406	10,551	9,354	8,326	7,185	7,989	1,436	239,297	.....

DISCHARGES, 1919.

Camps of occurrence	.....	2,010	1,114	1,297	981	1,079	1,118	817	274	121	95	23	12	416	9,357	.....
States of occurrence	.....	1,322	994	920	882	851	825	539	358	199	170	62	29	1,194	8,345	.....
Total	6,113	3,332	2,108	2,217	1,863	1,930	1,943	1,356	632	320	265	85	41	1,610	17,702	23,815

DEATHS, 1919.

Camps of occurrence	.....	426	147	94	62	43	21	29	12	10	7	9	6	20	886	.....
States of occurrence	.....	336	181	116	74	56	41	47	20	32	18	9	7	56	993	.....
Total	683	762	328	210	136	99	62	76	32	42	25	18	13	76	1,879	2,562

DAYS, 1919.

Camps of occurrence	.....	587,321	346,964	269,103	205,589	181,790	119,621	130,877	71,425	66,398	52,983	41,099	32,576	99,096	2,204,842	.....
States of occurrence	.....	511,616	378,200	331,030	242,965	204,047	197,258	193,066	168,810	136,869	110,342	73,994	51,719	293,694	2,896,610	.....
Total	1,378,437	1,098,937	725,164	600,133	448,554	385,837	316,879	323,943	240,235	203,267	163,325	115,093	84,295	395,790	5,101,452	6,479,889

TABLE 53.—*Camps and States of occurrence, diseases only (excluding discharges, deaths, and days lost from cases remaining from 1918), enlisted men in the United States—Ratios per 1,000.*

ADMISSIONS, 1919.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Not stated.[1]	Total.	Total, including remaining from 1918.
Camps of occurrence	995.87	847.79	799.06	712.42	771.69	765.95	915.36	732.93	716.77	735.17	669.77	763.20	.....	841.48	.....
States of occurrence	990.47	790.97	768.47	617.82	584.21	595.16	623.02	720.33	690.02	644.45	586.29	622.99	.....	729.37	.....
Total	993.52	819.62	783.01	661.58	666.51	666.08	735.11	724.31	698.58	670.75	610.65	664.03	.....	779.56	.....

DISCHARGES, 1919.

Camps of occurrence	57.22	49.29	72.35	68.84	94.35	121.76	108.73	59.59	28.42	26.46	6.70	3.41	.....	68.08	.....
States of occurrence	49.61	44.72	46.71	53.28	58.24	63.75	44.61	35.91	21.79	19.27	7.44	3.41	.....	49.23	.....
Total	53.94	47.03	58.93	60.48	74.09	87.83	69.19	43.39	23.90	21.35	7.22	3.41	.....	57.67	77.58

DEATHS, 1919.

Camps of occurrence	12.13	6.50	5.24	4.35	3.76	2.29	3.86	2.61	2.35	1.95	2.62	1.70	.....	6.45	.....
States of occurrence	12.61	8.14	5.89	4.47	3.83	3.17	3.89	2.01	3.50	2.04	1.08	.82	.....	5.86	.....
Total	12.34	7.32	5.58	4.41	3.80	2.80	3.88	2.20	3.14	2.01	1.53	1.08	.....	6.12	8.35

DAYS, 1919.

Camps of occurrence	45.81	42.06	41.13	39.53	43.55	35.69	47.72	42.56	42.72	40.42	32.79	25.34	.....	43.95	.....
States of occurrence	52.60	46.62	46.05	40.21	38.26	41.76	43.78	46.39	41.06	34.26	24.33	16.65	.....	46.81	.....
Total	48.74	44.32	43.70	39.90	40.58	39.25	45.29	45.19	41.59	36.05	26.80	19.20	.....	45.43	57.83

[1] No strength.

TABLE 54.—*Enlisted men in Europe, diseases only, months, 1919, and remaining 1918—Absolute numbers and ratios per 1,000.*

Months.	Admissions.		Discharges.		Deaths.		Days lost.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.[1]
January	71,307	525.25	1,065	7.84	1,328	9.78	1,996,102	40.28
February	65,664	546.70	925	7.70	1,559	12.98	1,760,024	40.15
March	44,597	431.99	777	7.53	476	4.61	1,170,054	31.05
April	29,665	365.77	574	7.08	265	3.27	697,243	23.55
May	16,948	299.75	321	5.68	126	2.23	340,305	16.49
June	11,203	400.35	161	5.75	75	2.68	199,424	19.53
July	6,664	644.18	117	11.31	40	3.87	119,620	31.68
August	5,295	1,277.13	52	12.54	16	3.86	75,366	49.80
September	4,211	1,598.71	14	5.32	8	3.04	81,367	84.63
October	2,322	1,311.86	7	3.95	2	1.13	50,430	78.06
November	1,808	1,141.41	5	3.16	6	3.79	30,168	52.18
December	2,107	1,375.33	4	2.61	4	2.61	23,732	42.45
Not stated	351	.....	4,450	.....	303	.....	1,020,030	.....
Total	262,142	479.46	8,472	15.50	4,208	7.70	7,563,865	37.90
Including cases remaining from 1918	.....	.....	9,721	17.78	4,555	8.33	8,437,111	42.28

[1] Noneffective rate.

INFLUENCE OF RACE.

ADMISSIONS.

During 1919 the highest admission rate for the enlisted men of the various races composing the United States Army was for the Porto Rican troops, 827.92. The other races stood: Colored, 572.06; white, 531.13; Filipinos, 487.52; and Hawaiians, 329.82. All of these showed a material improvement over those for the preceding year, when they were: Colored, 1,539.14; Porto Ricans, 1,501.10; Filipinos, 1,022.74; whites, 892.99; and Hawaiians, 707.96.

DEATHS.

During 1919 the highest death rate was for the colored troops, 14.73. The other races stood: White, 6.38; Porto Ricans, 4.30; Hawaiians, 3.84; and Filipinos, 3.81. All of these figures showed a material reduction over those for the preceding year, when they were: Colored, 35.01; white, 16.81; Porto Ricans, 13.65; Filipinos, 13.21; and Hawaiians, 4.60.

NONEFFECTIVE RATE.

For noneffective rates in 1919 the highest was for the colored, 49.76 per 1,000. The other races stood: White, 42.71; Porto Ricans, 29.74; Hawaiians, 16.69; and Filipinos, 15.26. All of these, with the exception of that for the whites, showed a material reduction from those of the preceding year, when they were: Colored, 67.93; Porto Ricans, 44.10; white, 42.35; Filipinos, 29.65; and Hawaiians, 20.93.

DISCHARGES.

The highest rate in 1919 was for discharges for disability among the white troops, 36.65. The rates for the other races stood: Hawaiians, 36.43; colored, 31.63; Filipinos, 21.69; and Porto Ricans, 18.64. All of these figures, with the exception of that for the whites, showed a material reduction over those of the preceding year, when they were: Colored, 105.33; Hawaiians, 42.25; white, 34.77; Porto Ricans, 26.08; and Filipinos, 24.74.

INFLUENCE OF COUNTRY.

Table 55 shows the influence of country on the movement of the sick. In considering the figures shown in this table, it should be recalled that the rates for admissions, deaths, noneffective, and dis-

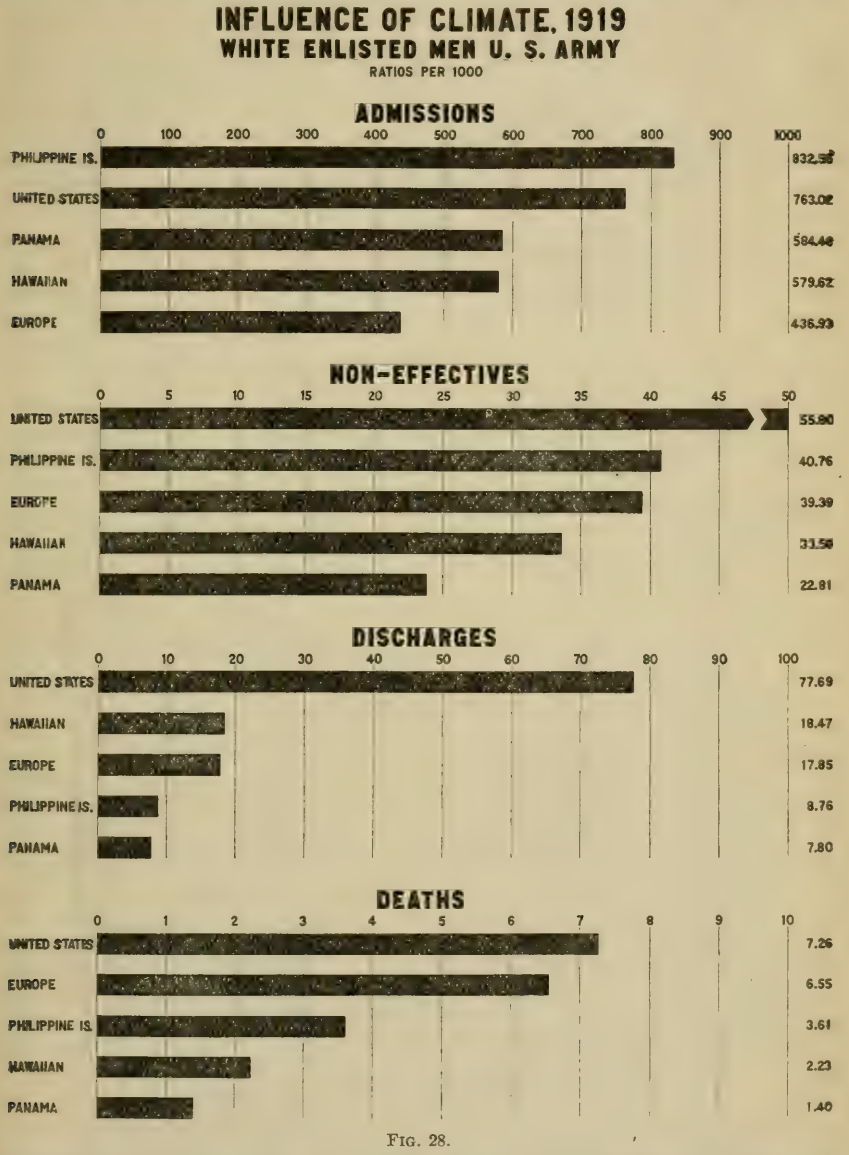


FIG. 28.

charges would normally be higher in the United States, where the recruiting and demobilization occurred, if environment in different countries were the same. It should also be recalled that in Europe during the first nine months of the year hospital cases only were reported. This would necessarily result in the lowering of the admission and the noneffective rates. With these reservations, the comparative rates can be considered.

For white and colored enlisted men, American troops, the highest admission rate was in the Philippine Islands, 826.63, and the next highest in the United States, 779.56 (the rate for other countries has been excluded, as it is unreliable). For deaths among American troops the rates for the United States and Europe were practically the same, 8.35 United States and 8.33 in Europe. The lowest death rate was for troops serving in Panama, 1.40. The highest noneffective rate was for the United States, 57.83; the next highest for Europe, 42.28; and the lowest for Panama, 22.81. Due to the number of men detected with disabilities at the time of demobilization, the discharge rate in the United States was 77.58. The next highest rate was for troops in Hawaii, 18.47; the lowest for troops in Panama, 7.80.

TABLE 55.—*Influence of race and country on the movement of the sick, 1919—Ratios per 1,000.*

	Admissions.	Deaths.	Noneffective.	Discharges.
Officers:				
United States	544.42	5.06	48.00	24.19
Europe	492.92	6.89	41.59	11.52
Other countries	221.79	1.23	12.26	5.16
Total	497.79	5.60	42.52	17.14
Enlisted men, American troops:				
United States—				
White	763.02	7.26	55.80	77.69
Colored	950.81	19.60	78.94	76.49
Total	779.56	8.35	57.83	77.58
Europe—				
White	436.93	6.55	39.39	17.85
Colored	450.01	14.18	41.82	14.95
Total	479.46	8.33	42.28	17.78
Philippine Islands—				
White	832.56	3.61	40.76	8.76
Colored	811.69	2.60	35.19	7.14
Total	826.63	3.32	39.17	8 30
Hawaii: White	579.62	2.23	33.59	18 47
Panama: White	584.48	1.40	22.81	7.80
Other countries	1,093.33	7.64	68.34	114.78
Transports	39.45	1.02	2 12	.77
All countries—				
White	531.13	6.38	42.71	36 65
Colored	572.06	14.73	49.76	31.63
Total	559.32	7.78	44.95	37.22
Officers and enlisted men	555.87	7.66	44.82	36.10
Native:				
Filipinos	487.52	3.81	15.26	21.69
Hawaiians	329.82	3.84	16.69	36.43
Porto Ricans	827.92	4.30	29.74	18.64
Native and American, officers and enlisted men	555.40	7.61	44.49	35.95

LARGE CAMPS IN THE UNITED STATES.

During the year 1919 the work of the medical department in the large camps in the United States, in addition to caring for the sick and injured, was largely centered upon the physical examinations of the men as they were demobilized from the war Army, and upon the recruiting of the new peace Army. The general sanitary arrangements for the camps had received a large amount of attention during 1917 and 1918, and they were in fairly satisfactory condition at the beginning of the year 1919.

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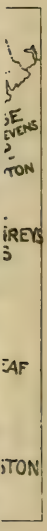

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TABLE 56.—*National Army and other large cantonments—General location, surroundings, and sanitary arrangements.*

Camp	General site of camp	Location	Terrain.	Character of natural drain and artificial drain.	Soil.	Water.				Sewage.		Disposition of waste.		
						Source.	How supplied.	Potability.	Treatment.	Quantity.	Treatment.	Disposition.	Garbage.	Manure.
[illegible]	[illegible]	[illegible]	Rolling plateau; [illegible] small ponds, average elevation 1,300 feet.	Good	[illegible] sand, & gravel	[illegible]	Camp	[illegible]	Chlorination	Sufficient	Septic tank effluent, chlorinated at times	Kewaunee River	Sold	[illegible]
[illegible]	[illegible]	[illegible]	Irregular and rolling plateau, 150 feet elevation	do	[illegible] sand, & gravel	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Sanitary fills	Nashua River	Burned	Used [illegible]
[illegible]	[illegible]	[illegible]	Rolling; [illegible]	Good, supplemented by drainage ditches	Sandy	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Septic tank & leaching tanks	South Run	Burned	Sold; [illegible]
[illegible]	[illegible]	[illegible]	Sandy ridge	do	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Septic tank & leaching tanks	[illegible]	Composted	Used [illegible]
[illegible]	[illegible]	[illegible]	Flat, with bluffs; [illegible]	Poor; drained partially by ditches	Clay and sand	Driven wells	Camp and private company	Satisfactory	Chlorination, intermittently	Twenty-four hours	Septic tanks & sprinkling filters	Lake Huron	Burned, buried, and composted	Used [illegible]
[illegible]	[illegible]	[illegible]	Flat; [illegible]	Flood plains; [illegible]	Sand, loam, and [illegible]	Driven wells	Camp	[illegible]	[illegible]	Sufficient	None	Kansas River	Burned	Used [illegible]
[illegible]	[illegible]	[illegible]	Rolling; [illegible]	Good	[illegible]	[illegible]	Camp	[illegible]	[illegible]	do	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Flat; level	Poor; good	Black loam	Creek	Camp	Satisfactory, for camp	None	do	[illegible]	Solid	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	In part rolling and low, part rolling, with 100 feet elevation	Rolling, well drained, low sections swampy; [illegible] ditches	Sandy, with clay foundation	Wells and springs	[illegible]	[illegible]	[illegible]	do	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Rolling; [illegible]	Rolling, [illegible]	Sandy	Creek	Camp	Satisfactory, for camp	None	do	None	Rock Creek and Kinnickinic River	Burned	Used [illegible]
[illegible]	[illegible]	[illegible]	Gently to [illegible]	Low and level; partly [illegible]	Sandy	[illegible]	[illegible]	[illegible]	[illegible]	do	[illegible]	Tidal flats	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Rolling; [illegible]	Subsoil [illegible]	Loam and sand	Driven wells	Camp	Satisfactory, for camp	None	do	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Flat; [illegible]	Swamp; [illegible]	Clay loam	Wells	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Rolling; [illegible]	Subsoil, except for [illegible] peaks	Clay loam	Wells and springs; [illegible] creek	[illegible]	Satisfactory, for camp	None	do	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Rolling; [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Table 56 has been prepared to give brief sanitary survey of such camps as were in operation at or near the close of the year 1919. Conditions varied from time to time, and many of the points recorded are matters of opinion, which necessarily varied. An attempt has been made to record, as nearly as possible, the consensus of opinion of those best qualified to form one relative to these features when the camps were in maximum operation.

The health conditions in them were, on the whole, satisfactory. During the first part of the year there were many admissions to hospital on account of the influenza epidemic, which was rapidly receding. The control of infectious diseases, other than tuberculosis, venereal diseases, and the respiratory diseases offered little difficulty. Many cases of tuberculosis and venereal diseases were detected when

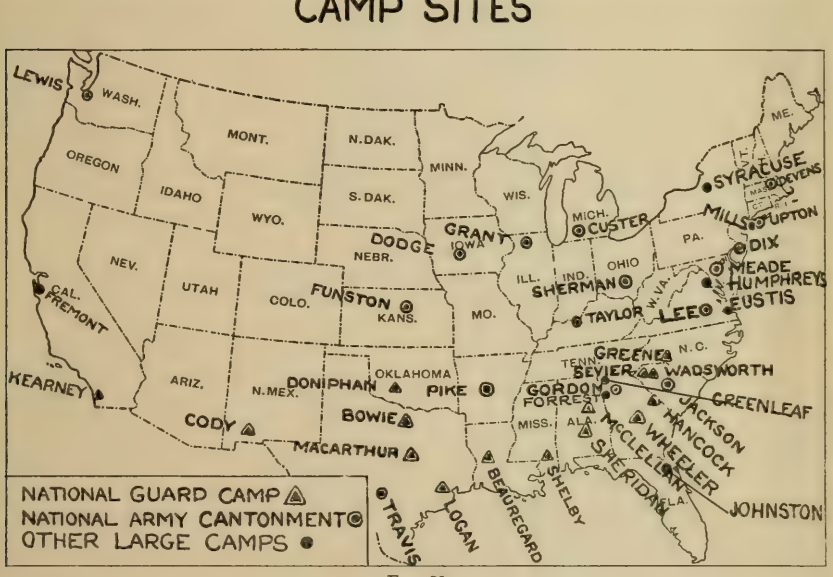


FIG. 29.

the men were examined for demobilization. Venereal diseases also occurred in recruits who were enlisted during the incubation period.

The total admission rate for enlisted men in the camps for the year was 841.48 per 1,000, which was above the general average for the United States, 779.56. Camp Bowie stood at the head of the list, with a rate of 1,182.92 per 1,000, and Camp Mills stood second.

The general death rate for enlisted men in the camps was 6.45, which also ranges above the average of 6.12 for the United States among 1919 cases (excluding deaths from cases remaining from 1918). Camp Hancock, Ga., stood at the head of the list, with a rate of 35.73; Camp McClellan was second, with 35.71.

For discharges for disability the rate for enlisted men in the camps was 68.08, which was above the average of 57.67 for the United States (excluding discharges from cases remaining from 1918). Camp Fremont stood at the head of the list for discharges, with a rate of 165.37, and Camp Hancock stood second, with 152.77. The largest number of discharges, though with a lower rate, occurred at Camp Grant, the number being 1,266 and the rate 131.45.

The general noneffective rate for the camps was 43.95, which was lower than the rate of 45.43 for the United States (excluding days lost from cases remaining from 1918). Camps Mills stood at the head of the list, with a noneffective rate of 73.35, and Camp Bowie stood second, with 65.94. The total days lost by enlisted men in the camps amounted to 2,204,842.

TABLE 57.—*Admissions from disease, camps of occurrence, enlisted men in the United States, 1919—Absolute numbers and ratios per 1,000.*

Camps.	Number.	Ratio.	Camps.	Number.	Ratio.
Bowie	2,548	1,182.92	Greene	573	793.63
Mills	4,321	1,180.28	Johnston	349	787.81
Beauregard	1,377	1,161.05	Lee	6,231	787.04
Dodge	6,157	1,105.78	Logan	955	773.91
Funston	5,658	1,057.17	Devens	4,586	770.63
Pike	5,632	1,047.06	Upton	6,209	697.72
Travis	5,993	1,029.37	Grant	6,667	692.24
Taylor	8,006	1,023.26	Humphreys	1,399	686.79
Lewis	5,154	1,017.17	Dix	7,272	665.75
McClellan	1,830	1,005.49	Eustis	1,265	638.24
Hancock	1,862	964.27	Gordon	3,497	625.69
Shelby	2,293	912.09	Custer	3,038	608.57
Jackson	5,201	892.72	Kearny	1,438	560.19
Cody	432	888.89	Wheeler	226	517.16
Meade	7,075	887.48	Wadsworth	445	334.08
MacArthur	920	879.54	Forrest	15	88.76
Fremont	326	842.38	Greenleaf	23	51.45
Sevier	755	832.41			
Sheridan	1,082	810.49	Total	115,650	841.48
Sherman	4,840	809.36			

TABLE 58.—*Admissions from disease by camps, by months, enlisted men in the United States, 1919—Absolute numbers.*

Camps.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Beauregard	926	319	115	9	2	3		1		1			1	1,377
Bowie	447	608	486	422	233	208	134	9	1					2,548
Cody	137	135	122	12	3	4	2				1		16	432
Custer	1,213	471	402	322	262	145	99	28	13	25	29	28	1	3,038
Devens	1,077	450	572	1,002	484	255	348	136	136	54	32	32	8	4,586
Dix	886	810	669	487	746	547	672	402	490	462	451	624	26	7,272
Dodge	1,793	1,033	894	496	363	576	365	153	154	139	98	92	1	6,157
Eustis	298	266	367	88	43	29	31		27	34	23	59		1,265
Forrest	13		1										1	15
Fremont	196	69	55	3		1	1						1	326
Funston	1,537	1,061	853	451	474	418	218	150	110	153	118	115		5,658
Gordon	876	671	455	292	245	120	221	160	101	99	120	118	19	3,497
Grant	1,193	977	812	467	709	781	663	233	179	182	169	295	7	6,667
Greene	292	225	46	1	1		1						7	573
Greenleaf	18		1				1		3					23
Hancock	1,350	368	116	7	4	3	2	7					5	1,862
Humphreys	511	321	218	70	59	42	27	32	24	22	34	29	10	1,399
Jackson	1,493	848	551	486	324	393	313	152	135	118	251	126	11	5,201
Johnston	277	51	7	6	2	1	2				1	2		349
Kearny	638	216	184	143	127	39	27	13	17	11	8	14	1	1,438
Lee	2,272	1,081	594	490	356	388	386	186	149	100	104	103	22	6,231
Lewis	2,214	809	528	378	351	210	217	142	100	76	70	59		5,154
Logan	681	191	49	3	1	6	7		2	10		1	4	955
MacArthur	448	298	116		12	2	1	21		10		2	10	920
McClellan	1,462	279	55	18	6	2		2	1	1	3		1	1,830
Meade	1,891	679	679	687	769	674	495	154	386	256	146	254	5	7,075
Mills	846	701	830	707	446	325	283	78	76	7	8	2	12	4,321
Pike	1,910	937	533	362	366	295	341	221	201	239	105	115	7	5,632
Sevier	483	198	52	13	1	1	1				3	1	2	755
Shelby	619	297	362	243	197	125	226	130	85	6		2	1	2,293
Sheridan	760	241	53	10	4	7	1	6						1,082
Sherman	827	727	537	641	490	403	576	310	86	94	77	71	1	4,840
Taylor	1,823	1,515	1,235	681	629	451	489	200	268	248	212	252	3	8,006
Travis	2,316	1,256	765	330	215	133	166	153	228	210	107	108	6	5,993
Wadsworth	277	106	41	6	4	2	3	3			1		2	445
Wheeler	121	97	5	1		2								226
Upton	859	849	964	818	897	442	559	288	80	83	129	184	57	6,209
Total	34,980	19,160	14,324	10,152	8,825	7,033	6,878	3,370	3,052	2,640	2,300	2,688	248	115,650

TABLE 59.—*Deaths from disease, camps of occurrence, enlisted men in the United States, 1919 (excluding deaths from remaining cases, 1918)—Absolute numbers and ratios per 1,000.*

Camps.	Number.	Ratio.	Camps.	Number.	Ratio.
Hancock	69	35.73	Eustis	11	5.55
McClellan	65	35.71	Greene	4	5.54
Cody	7	14.40	Beauregard	6	5.06
Logan	16	12.97	Devens	30	5.04
Mills	38	10.38	Shelby	12	4.77
Sevier	9	9.92	Grant	45	4.67
Funston	53	9.90	Meade	37	4.64
Johnston	4	9.03	Gordon	25	4.47
Humphreys	18	8.84	Travis	25	4.29
Jackson	51	8.75	Custer	20	4.01
Taylor	60	7.67	Lee	25	3.16
Sherman	42	7.02	Dix	20	2.84
Kearny	18	7.01	Lewis	14	2.76
MacArthur	7	6.69	Greenleaf	1	2.24
Pike	34	6.38	Wadsworth	1	.75
Dodge	34	6.11	Wheeler	.....	.....
Sheridan	8	5.99	Fremont	.....	.....
Upton	53	5.96			
Forrest	1	5.92	Total	886	6.45
Bowie	12	5.57			

TABLE 60.—*Deaths from disease, by camps, enlisted men in the United States, by months, 1919 (excluding deaths from remaining cases, 1918)—Absolute numbers.*

Camps.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Beauregard	3	3	....	....	....	....	....	....	....	....	....	....	....	6
Bowie	2	7	2	1	....	....	....	....	....	....	....	....	....	12
Cody	2	3	2	....	....	....	....	....	....	....	....	....	....	7
Custer	14	2	....	2	....	....	....	....	....	....	....	1	1	20
Devens	5	5	5	10	....	1	1	....	1	....	....	....	2	30
Dix	8	4	6	2	4	2	....	2	1	1	....	....	1	31
Dodge	15	4	7	4	1	....	2	....	....	....	1	....	....	34
Eustis	6	1	1	1	1	1	....	....	....	....	....	....	....	11
Forrest	1	....	....	....	....	....	....	....	....	....	....	....	....	1
Fremont	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Funston	30	5	9	2	1	2	1	1	1	....	1	....	....	53
Gordon	7	3	1	2	1	1	1	1	1	1	....	....	6	25
Grant	12	11	8	4	5	1	1	....	2	....	....	....	1	45
Greene	3	1	....	....	....	....	....	....	....	....	....	....	....	4
Greenleaf	1	....	....	....	....	....	....	....	....	....	....	....	....	1
Hancock	66	2	1	....	....	....	....	....	....	....	....	....	....	69
Humphreys	9	5	1	1	....	....	1	....	....	1	....	....	....	18
Jackson	29	8	1	5	2	1	3	1	....	....	....	....	1	51
Johnston	4	....	....	....	....	....	....	....	....	....	....	....	....	4
Kearny	6	....	3	5	2	....	2	....	....	....	....	....	....	18
Lee	6	5	3	3	....	....	4	....	1	....	1	....	2	25
Lewis	3	4	4	1	1	....	....	....	1	....	....	....	....	14
Logan	11	....	4	....	....	1	....	....	....	....	....	....	....	16
MacArthur	7	....	....	....	....	....	....	....	....	....	....	....	....	7
McClellan	61	2	1	....	....	....	....	....	....	....	1	....	....	65
Meade	18	5	3	1	2	....	....	1	2	....	3	1	1	37
Mills	11	3	4	10	3	1	4	2	....	....	....	....	....	38
Pike	17	5	2	2	1	1	2	2	....	1	....	....	1	34
Sevier	6	....	2	....	....	....	....	....	....	....	1	....	....	9
Shelby	6	1	....	1	1	2	1	....	....	....	....	....	....	12
Sheridan	5	1	....	1	1	....	....	....	....	....	....	....	....	8
Sherman	15	8	3	3	5	2	2	....	....	....	....	1	3	42
Taylor	9	30	7	1	4	....	1	1	....	2	1	3	1	60
Travis	15	3	4	....	1	2	....	....	....	....	....	....	....	25
Wadsworth	....	1	....	....	....	....	....	....	....	....	....	....	....	1
Wheeler	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Upton	13	15	10	....	7	3	3	1	....	1	....	....	....	53
Total	426	147	94	62	43	21	29	12	10	7	9	6	20	886

TABLE 61.—*Discharges for disability from disease, camps of occurrence, enlisted men in the United States, 1919 (excluding discharges from remaining cases 1918)—Absolute numbers and ratios per 1,000.*

Camps.	Number.	Ratio.	Camps.	Number.	Ratio.
Fremont	64	165.37	Wadsworth	79	59.31
Hancock	295	152.77	Lewis	290	57.23
Johnston	63	142.21	Shelby	143	56.88
Grant	1,266	131.45	Dodge	631	55.85
Sevier	105	115.77	Logan	61	49.43
MacArthur	107	102.29	Lee	317	40.04
Mills	331	90.41	Dix	311	28.47
Custer	450	90.14	Kearny	72	28.05
Travis	494	84.85	McClellan	51	28.02
Jackson	488	83.76	Humphreys	55	27.00
Sherman	494	82.61	Pike	107	20.08
Bowie	169	78.46	Sheridan	24	17.98
Funston	417	77.91	Beauregard	18	15.18
Meade	576	72.25	Wheeler	6	13.73
Greene	52	72.02	Forrest	2	11.83
Cody	34	69.96	Greenleaf	5	11.19
Devens	393	66.04	Eustis	17	8.58
Gordon	357	63.88			
Upton	548	61.58	Total	9,357	68.08
Taylor	465	59.43			

TABLE 62.—*Discharges for disability from disease by camps, enlisted men in the United States, by months, 1919 (excluding discharges from remaining cases 1918)—Absolute numbers.*

Camps.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Beauregard	9	2	1	....	.....	1	....	....	....	....	....	....	5	18
Bowie	15	35	16	13	19	38	30	....	....	....	....	....	3	169
Cody	8	1	12	3	.....	.....	.....	.....	.....	.....	.....	.....	10	34
Custer	123	85	76	65	49	32	8	3	....	....	1	....	8	450
Devens	103	60	76	56	38	14	17	4	5	....	4	1	15	393
Dix	47	39	41	28	51	42	23	10	6	2	.....	.....	22	311
Dodge	80	66	237	120	68	26	5	6	3	10	1	1	8	631
Eustis	6	1	4	....	.....	.....	.....	1	....	1	....	....	4	17
Forrest	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Fremont	26	14	18	....	2	1	.....	.....	.....	.....	.....	.....	3	64
Funston	65	35	69	59	85	66	20	6	....	3	.....	.....	9	417
Gordon	80	51	53	47	44	18	22	13	4	8	2	....	15	357
Grant	125	77	74	77	160	380	234	73	21	20	2	....	23	1,266
Greene	25	15	10	1	1	.....	.....	.....	.....	.....	.....	.....	.....	52
Greenleaf	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
Hancock	212	62	10	1	1	2	1	2	.....	.....	1	....	3	295
Humphreys	17	7	9	1	8	5	1	1	2	.....	.....	.....	4	55
Jackson	73	50	48	44	43	94	99	2	4	.....	.....	1	30	488
Johnston	43	18	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63
Kearny	29	9	8	10	8	2	.....	.....	1	....	....	1	4	72
Lee	72	55	38	39	21	14	30	9	6	1	....	1	31	317
Lewis	92	20	37	22	40	25	21	16	7	3	1	1	5	290
Logan	32	9	1	1	.....	1	2	1	1	10	1	....	2	61
MacArthur	75	3	3	2	5	2	3	2	....	11	.....	.....	1	107
McClellan	26	18	3	1	.....	.....	1	1	....	1	.....	.....	.....	51
Meade	124	64	56	64	68	74	57	21	12	12	3	1	20	576
Mills	43	54	65	66	27	4	6	....	1	.....	.....	.....	65	331
Pike	46	19	9	3	9	4	5	1	3	2	....	1	5	107
Sevier	67	23	7	2	1	.....	.....	.....	.....	.....	1	....	4	105
Shelby	14	9	6	19	32	10	17	9	12	2	1	....	12	143
Sheridan	13	4	2	.....	.....	1	....	1	1	.....	.....	.....	2	24
Sherman	57	33	35	27	83	106	91	33	2	5	....	2	20	494
Taylor	42	64	61	58	78	58	34	21	16	2	.....	.....	31	465
Travis	60	53	151	75	60	23	28	14	8	2	2	1	17	494
Wadsworth	56	9	7	....	1	2	1	1	.....	.....	1	....	1	79
Wheeler	3	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	6
Upton	95	49	52	76	77	72	61	23	6	....	2	1	34	548
Total	2,010	1,114	1,297	981	1,079	1,118	817	274	121	95	23	12	416	9,357

TABLE 63.—*Days lost from disease, camps of occurrence, enlisted men in the United States, 1919 (excluding days from remaining cases, 1918)—Absolute numbers and ratios per 1,000 (noneffective rate).*

Camps.	Number.	Ratio.	Camps.	Number.	Ratio.
Mills	98,012	73.35	Meade	121,602	41.79
Bowie	51,843	65.94	Humphreys	30,389	40.87
Pike	119,987	61.70	Devens	88,055	40.54
Fremont	8,712	61.68	Sevier	13,069	39.48
McClellan	39,610	59.63	Gordon	76,164	37.34
Dodge	115,850	57.00	Upton	112,181	34.54
Shelby	48,258	52.59	Johnston	5,211	32.23
Lewis	94,580	51.14	Logan	14,106	31.32
Sherman	110,206	50.49	Wheeler	4,987	31.27
Jackson	107,255	50.44	Eustis	22,286	30.81
Travis	105,652	49.72	Custer	53,354	29.28
Taylor	135,407	47.42	Grant	99,659	28.35
Lee	136,559	47.26	Sheridan	13,403	27.51
Hancock	31,349	44.48	Kearny	25,030	26.71
Funston	86,557	44.31	Wadsworth	6,937	14.27
Beauregard	18,882	43.62	Forrest	469	7.60
Dix	173,598	43.54	Greenleaf	632	3.88
Cody	7,658	43.17			
MacArthur	16,240	42.54	Total	2,204,842	43.95
Greene	11,093	42.09			

TABLE 64.—*Days lost from disease, by camps, enlisted men in the United States, by months, 1919 (excluding days from cases remaining, 1918)—Absolute numbers.*

Camps.	January.	February.	March.	April.	May.	June.	July.
Beauregard	10,015	4,366	1,738	400	25	29	160
Bowie	10,403	12,549	9,255	7,869	4,812	3,421	1,917
Cody	2,789	1,995	2,051	228	20	16	20
Custer	16,604	8,111	7,801	7,151	3,663	2,367	2,583
Devens	19,748	8,496	10,498	18,022	9,014	4,388	6,116
Dix	19,526	18,160	17,027	11,530	19,515	14,899	14,934
Dodge	32,009	21,248	14,796	8,395	7,972	7,955	5,352
Eustis	5,582	4,062	5,873	1,591	838	557	563
Forrest	386	.....	54	.....	.....	.....	.....
Fremont	5,132	1,356	951	200	63	86	3
Funston	13,928	16,387	13,899	8,449	9,836	6,489	3,885
Gordon	19,013	13,093	11,335	6,116	6,075	1,836	4,400
Grant	22,916	15,937	13,077	8,005	10,018	8,912	5,695
Greene	5,357	3,885	1,089	25	25	.....	5
Greenleaf	315	.....	21	.....	.....	.....	61
Hancock	21,067	5,661	2,395	74	83	148	6
Humphreys	8,808	4,539	4,027	1,312	1,144	1,367	426
Jackson	27,593	16,055	11,953	11,864	7,388	5,991	6,731
Johnston	3,868	493	245	53	25	140	10
Kearny	8,397	2,995	3,949	3,205	2,576	788	495
Lee	43,695	20,628	13,176	13,016	8,668	9,310	8,302
Lewis	34,596	16,480	11,427	7,786	7,041	3,950	4,191
Logan	8,762	2,539	1,170	17	2	138	51
MacArthur	7,681	3,486	1,420	364	342	34	74
McClellan	32,290	5,176	704	232	84	8	206
Meade	27,509	10,151	11,691	11,267	15,868	10,101	8,937
Mills	18,499	16,828	15,272	13,237	9,108	5,834	5,966
Pike	30,916	20,742	12,814	9,753	12,308	5,452	7,084
Sevier	6,225	3,338	1,554	635	28	3	1
Shelby	10,386	5,392	6,120	4,646	4,222	2,918	5,549
Sheridan	7,840	3,746	910	123	103	334	42
Sherman	19,081	16,431	12,641	16,707	9,658	5,786	12,497
Taylor	26,642	26,925	19,139	12,508	9,993	5,907	10,160
Travis	40,055	18,046	11,789	6,909	4,730	3,356	3,991
Wadsworth	3,551	1,695	435	56	73	109	249
Wheeler	3,047	1,237	156	472	36	27	.....
Upton	13,090	14,736	16,651	13,372	16,434	6,965	10,215
Total	587,321	346,964	269,103	205,589	181,790	119,621	130,877

TABLE 64.—*Days lost from disease, by camps, enlisted men in the United States, by months, 1919 (excluding days from cases remaining, 1918)—Absolute numbers*—Con.

Camps.	August.	September.	October.	November.	December.	Month not stated.	Total.
Beauregard	1	89	34	13	.....	2,012	18,882
Bowie	139	41	.....	36	.....	1,401	51,843
Cody	28	.....	99	2	.....	410	7,658
Custer	1,082	402	623	442	283	2,242	53,354
Devens	3,000	2,789	1,177	580	762	3,465	88,055
Dix	8,966	11,645	11,688	10,722	7,153	7,833	173,598
Dodge	3,300	3,379	4,679	2,421	1,434	2,910	115,850
Eustis	.....	563	656	412	767	822	22,286
Forrest	.....	.....	.....	.....	.....	29	469
Fremont	.....	.....	.....	.....	.....	921	8,712
Funston	4,619	2,421	1,569	1,811	978	2,286	86,557
Gordon	4,158	2,239	1,785	1,766	941	3,407	76,164
Grant	3,774	2,275	2,163	1,795	1,965	3,127	99,659
Greene	24	38	244	2	334	65	11,093
Greenleaf	.....	82	45	.....	.....	108	632
Hancock	299	.....	44	25	11	1,536	31,349
Humphreys	872	564	580	1,124	3,617	2,009	30,389
Jackson	4,075	3,511	1,739	2,071	1,154	7,130	107,255
Johnston	.....	2	89	25	16	245	5,211
Kearny	216	371	279	318	313	1,128	25,030
Lee	4,075	2,872	1,849	1,938	1,318	7,712	136,559
Lewis	3,280	1,441	1,089	1,239	866	1,194	94,580
Logan	11	35	423	609	28	321	14,106
MacArthur	868	1	250	.....	216	1,504	16,240
McClellan	47	136	160	52	143	372	39,610
Meade	2,690	7,572	5,501	2,961	2,539	4,815	121,602
Mills	1,267	1,524	288	268	45	9,876	98,012
Pike	4,128	4,274	4,622	2,380	1,442	4,072	119,987
Sevier	.....	22	.....	117	381	765	13,069
Shelby	2,458	3,208	67	164	286	2,842	48,258
Sheridan	14	69	.....	.....	.....	222	13,403
Sherman	6,302	1,752	1,413	1,197	776	5,965	110,206
Taylor	3,517	4,620	4,963	3,430	1,998	5,555	135,407
Travis	2,850	4,436	2,876	1,331	1,414	3,869	105,652
Wadsworth	59	419	.....	113	141	37	6,937
Wheeler	.....	.....	.....	2	10	.....	4,987
Upton	5,306	3,606	1,989	1,683	1,245	6,889	112,181
Total	71,425	66,398	52,983	41,099	32,576	99,096	2,204,842

TABLE 65.—*Strength of large camps, total enlisted, 1919.*[1]

Camps.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Beauregard, La	6,870	5,229	1,809	192	73	37	20	.....	.....	.....	.....	.....
Bowie, Tex	5,056	5,816	4,750	3,689	2,481	3,135	901	17	.....	.....	.....	.....
Cody, N. Mex	2,163	1,750	1,157	577	137	29	15	10	.....	.....	.....	.....
Custer, Mich.[2]	20,003	9,620	8,075	8,807	5,868	2,352	1,573	623	602	603	836	943
Devens, Mass	21,946	8,742	8,199	7,162	9,182	5,044	4,472	1,759	1,575	1,170	1,169	991
Dix, N. J.[2]	16,327	17,935	15,590	13,346	14,220	14,444	10,544	9,332	5,790	5,155	3,667	4,724
Dodge, Iowa[2]	14,568	10,746	9,160	7,563	6,583	5,321	4,298	2,474	2,390	1,506	1,262	940
Eustis, Va	3,528	3,450	5,367	3,118	1,842	1,401	851	657	959	868	803	938
Forrest, Ga	1,581	444	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fremont, Calif	2,293	1,419	871	61	.....	.....	.....	.....	.....	.....	.....	.....
Funston, Kans.[2]	23,770	10,468	6,679	5,157	6,355	4,516	2,015	1,198	1,164	992	1,104	809
Gordon, Ga.[2]	14,904	9,537	6,789	7,121	4,284	3,195	5,280	5,561	3,044	2,864	2,326	2,160
Grant, Ill	22,981	18,134	15,478	15,729	12,708	6,271	6,636	4,181	3,887	3,153	3,160	3,256
Greene, N. C.[2]	4,048	3,919	701	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greenleaf, Ga	1,956	516	1,946	940	.....	.....	.....	.....	.....	.....	.....	.....
Hancock, Ga	13,053	7,233	2,465	352	68	.....	.....	.....	.....	.....	.....	.....
Humphreys, Va.[2]	6,150	3,994	4,697	2,205	1,770	1,137	1,093	731	847	563	571	686
Jackson, S. C.[2]	17,424	11,004	7,243	6,033	4,496	8,810	4,328	1,444	1,610	2,286	2,599	2,638
Johnston, Fla	2,758	1,481	651	175	40	36	32	30	30	28	27	27
Kearny, Calif	12,792	6,312	3,165	2,811	1,143	792	873	659	573	570	492	621
Lee, Va.[2]	24,948	16,869	12,647	8,391	6,297	8,179	8,650	2,424	1,761	1,672	1,578	1,588
Lewis, Wash.[2]	20,084	11,982	7,021	4,336	3,832	2,963	1,973	1,546	1,617	1,477	1,971	2,000
Logan, Tex	9,338	4,336	516	122	.....	.....	.....	.....	.....	.....	.....	.....
MacArthur, Tex	6,276	3,543	2,204	424	108	.....	.....	.....	.....	.....	.....	.....
McClellan, Ala	14,600	3,558	1,940	1,169	243	75	61	54	48	35	28	26
Meade, Md	20,730	13,356	11,086	8,963	7,471	7,424	3,871	2,281	8,090	4,704	3,778	3,907
Mills, N. Y	5,626	4,916	6,391	9,493	5,141	4,932	2,478	2,082	1,457	725	689	.....
Pike, Ark	13,612	7,874	6,585	6,227	4,052	3,821	4,017	2,787	4,430	4,023	3,396	3,113
Sevier, S. C	5,414	3,389	1,638	446	.....	.....	.....	.....	.....	.....	.....	.....
Shelby, Miss	6,283	5,023	4,508	3,382	3,486	2,592	2,553	1,714	591	30	.....	.....
Sheridan, Ala	10,510	4,770	574	77	56	9	8	6	2	.....	.....	.....
Sherman, Ohio[2]	11,167	8,286	8,487	12,970	8,282	6,882	5,506	3,876	2,007	1,366	1,405	1,526
Taylor, Ky.[2]	15,722	14,377	12,443	9,635	7,683	6,363	6,492	3,737	2,778	4,074	4,958	5,628
Travis, Tex	19,849	12,505	9,544	6,005	2,597	2,426	2,267	2,364	3,356	2,932	2,963	3,063
Upton, N. Y.[2]	13,817	11,960	22,009	13,274	16,267	7,550	8,908	3,280	2,323	2,287	2,427	2,683
Wadsworth, S. C	6,392	4,684	2,135	909	462	438	455	347	159	6	.....	.....
Wheeler, Ga	2,466	2,020	609	138	10	4	.....	.....	.....	.....	.....	.....
Aggregate for year	421,505	271,197	215,129	170,999	137,237	110,178	90,170	55,174	51,090	43,089	41,209	42,267

[1] Source of information: Monthly sick and wounded reports to the Surgeon General's Office; daily average strength for each month.
[2] Increased by estimates based on demobilization figures.

TABLE 66.—*Admissions, special infectious diseases by camps, white enlisted men, 1919—Absolute numbers.*

Camps.	Measles.	Influenza.	Mumps.	Malaria.	Meningitis.	Pneumonia.	Typhoid fever.	Scarlet fever.	Tuberculosis.	Other respiratory.	Diphtheria.	German Measles.	Syphilis.	Chancroid.	Gonorrhea.	Total.
McClellan	6	308	50	1	1	77	...	1	9	870	2	...	10	6	19	1,360
Pike	17	158	615	47	3	43	...	13	24	1,351	...	...	165	54	218	2,708
Fremont	...	12	14	...	...	14	...	...	9	102	2	...	...	...	3	156
Johnston	3	51	17	2	1	1	...	2	1	38	...	...	2	1	17	136
Gordon	5	12	277	17	1	30	...	2	47	997	3	11	83	66	151	1,702
Grant	109	117	504	2	2	58	1	41	86	1,482	57	5	265	75	502	3,306
Dodge	21	182	732	1	2	42	...	79	88	1,495	25	...	43	65	262	3,037
Funston	11	206	1,014	4	5	66	...	190	46	1,732	88	1	98	38	290	3,789
Taylor	20	248	467	9	4	56	1	56	51	2,016	11	...	152	68	427	3,586
Beauregard	7	23	205	9	1	3	...	...	8	444	...	8	30	2	76	816
Meade	54	55	213	9	8	57	8	64	68	1,845	11	37	181	66	427	3,103
Devens	4	369	97	2	9	52	...	13	79	848	8	9	129	86	332	2,037
Custer	20	10	135	1	...	29	1	37	22	964	6	...	53	30	146	1,454
Shelby	6	93	78	10	...	10	...	...	24	431	1	...	38	13	78	782
Dix	12	76	227	4	2	35	...	8	153	1,368	5	6	436	100	566	2,998
Cody	1	82	28	...	...	4	...	4	1	104	...	...	6	...	13	243
Mills	15	544	271	2	8	37	1	13	16	1,012	6	5	47	39	146	2,162
Greene	5	65	10	...	...	2	1	1	2	49	...	...	5	4	13	157
Sherman	3	82	244	...	2	24	1	21	69	767	2	1	180	58	288	1,742
Doniphan	13	188	52	3	...	8	1	9	19	413	14	...	140	20	194	1,074
Jackson	31	415	311	49	4	74	1	1	68	999	5	1	76	79	201	2,315
Bowie	103	57	88	9	3	13	1	1	28	397	9	1	35	55	92	892
Lee	37	304	506	10	5	22	1	38	82	1,391	4	54	97	89	199	2,839
Lewis	33	164	1,011	2	5	115	...	21	79	1,128	18	5	80	29	174	2,864
Sheridan	4	5	78	...	...	8	...	1	5	486	...	...	7	3	38	635
Kearny	4	172	44	1	2	9	...	...	16	262	4	3	65	8	59	649
Hancock	2	294	74	1	1	75	...	12	11	426	1	...	9	12	37	955
Upton	18	153	152	8	4	64	...	4	74	1,457	9	3	168	53	307	2,474
Sevier	...	99	14	1	1	8	...	...	8	206	...	1	14	4	23	379
Logan	26	163	31	2	2	10	...	...	2	242	...	...	15	5	38	536
Humphreys	5	64	122	2	...	19	...	10	13	235	1	24	23	13	51	582
Wheeler	8	22	2	3	...	4	...	...	2	32	...	...	8	2	12	95
Syracuse	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Wadsworth	15	7	4	2	1	7	...	...	17	109	...	...	10	5	16	193
MacArthur	...	59	68	2	...	11	3	4	13	300	...	...	5	4	33	502
Eustis	5	62	208	25	...	8	...	...	14	277	...	6	14	16	41	676
Greenleaf	...	2	...	...	...	...	...	...	...	5	...	...	...	...	...	7
Travis	63	215	726	22	2	26	1	1	106	1,820	1	...	94	44	300	3,421
Forrest	1	2	2	...	...	...	...	...	...	1	...	...	...	...	2	8
Total	687	5,141	8,691	262	79	1,121	22	647	1,360	28,101	293	181	2,783	1,212	5,791	56,371

TABLE 67.—*Admissions, special infectious diseases by camps, colored enlisted men, 1919—Absolute numbers.*

Camps.	Measles.	Influenza.	Mumps.	Malaria.	Meningitis.	Pneumonia.	Scarlet fever.	Tuberculosis.	Other respiratory.	Diphtheria.	German measles.	Syphilis.	Chancroid.	Gonorrhea.	Total.
McClellan	1	15	69	1	....	12	....	....	32	....	....	25	14	19	188
Pike	2	26	107	2	....	31	....	6	195	....	....	189	54	133	745
Fremont	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Johnston	1	3	46	....	....	....	....	....	3	....	....	7	4	14	78
Gordon	6	1	21	....	....	16	....	23	160	1	....	74	114	115	531
Grant	16	24	38	1	2	22	....	4	172	4	....	38	9	58	388
Dodge	....	14	76	....	....	5	....	8	94	1	....	10	7	40	255
Funston	1	15	52	....	....	8	....	4	132	2	....	24	15	45	298
Taylor	....	35	122	1	....	17	....	12	277	....	....	108	61	887	1,520
Beauregard	4	2	11	....	....	9	....	7	45	....	1	41	9	68	197
Meade	2	2	65	....	2	23	....	24	238	1	1	145	27	196	726
Devens	....	16	11	....	1	16	....	4	63	....	2	37	6	40	196
Custer	1	....	2	....	....	1	....	4	68	....	....	6	9	18	109
Shelby	....	31	53	1	1	28	....	14	114	....	....	128	66	98	534
Dix	1	12	46	....	1	8	....	12	97	....	....	83	17	60	337
Cody	....	9	....	....	....	1	....	....	15	....	....	....	....	1	26
Mills	2	98	165	1	1	18	....	5	181	....	....	15	12	49	547
Greene	9	4	52	1	....	14	....	1	42	....	....	32	23	40	218
Sherman	....	26	71	....	1	8	1	6	136	1	....	61	24	71	406
Doniphan	....	1	1	....	....	....	....	1	9	....	....	8	4	12	36
Jackson	2	49	108	5	1	34	....	26	206	1	1	131	93	197	854
Bowie	27	7	76	....	1	69	....	6	161	7	....	35	99	79	567
Lee	3	10	28	....	....	25	....	35	136	1	7	128	135	92	600
Lewis	....	1	....	....	....	....	....	1	1	....	....	2	....	....	5
Sheridan	....	....	28	....	1	8	....	....	47	....	....	8	16	15	123
Kearney	....	....	....	....	....	....	....	....	....	....	....	1	....	1	2
Hancock	1	10	32	....	....	16	....	2	70	....	....	20	53	47	251
Upton	....	35	23	3	2	103	....	7	173	....	....	49	27	71	493
Sevier	....	4	6	....	....	7	....	4	15	....	....	21	7	9	73
Logan	....	12	2	....	....	2	....	1	7	....	....	8	17	6	55
Humphreys	2	28	49	....	1	20	....	10	75	....	....	20	33	67	305
Wheeler	2	4	3	....	....	....	....	....	10	....	....	16	7	14	56
Syracuse	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Wadsworth	....	2	3	....	....	2	....	7	10	....	....	18	5	9	56
MacArthur	1	6	10	....	....	....	....	2	21	....	....	5	6	11	62
Eustis	....	12	20	....	....	2	....	2	56	....	....	2	9	17	120
Greenlief	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1
Travis	18	36	121	....	....	6	....	25	87	....	....	86	32	112	523
Forrest	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	102	550	1,517	16	15	531	1	263	3,149	19	12	1,581	1,014	2,711	11,481

TABLE 68.—*Deaths, special infectious diseases by camps, white enlisted men, 1919—Absolute numbers.*

Camps.	Measles.	Influenza.	Mumps.	Malaria.	Meningitis.	Pneumonia.	Typhoid fever.	Scarlet fever.	Tuberculosis.	Other respiratory.	Diphtheria.	Total.
1918, remaining	14	53	2	.....	10	47	.....	.....	54	8	.....	188
McClellan	.....	23	.....	.....	1	35	.....	.....	1	.....	.....	60
Pike	.....	1	.....	.....	1	11	.....	1	3	.....	.....	17
Fremont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Johnston	.....	3	.....	.....	.....	.....	.....	1	.....	.....	.....	4
Gordon	.....	.....	1	.....	.....	1	.....	.....	5	2	.....	9
Grant	1	1	.....	.....	1	15	.....	2	4	.....	2	26
Dodge	2	2	.....	.....	2	8	.....	1	3	.....	.....	18
Funston	.....	3	2	.....	1	25	.....	3	3	.....	.....	37
Taylor	.....	14	1	.....	.....	17	.....	2	3	2	.....	39
Beauregard	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
Meade	2	5	.....	.....	2	6	.....	3	1	.....	.....	19
Devens	.....	5	.....	.....	3	3	.....	.....	9	2	.....	22
Custer	1	.....	.....	.....	.....	7	.....	.....	1	2	.....	11
Shelby	.....	3	.....	.....	.....	2	.....	.....	1	1	.....	7
Dix	.....	3	.....	.....	2	8	.....	.....	7	1	.....	21
Cody	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	3
Mills	.....	14	.....	.....	3	8	.....	.....	1	.....	.....	26
Greene	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Sherman	.....	9	.....	.....	.....	7	1	1	9	.....	1	28
Doniphan	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Jackson	.....	8	.....	.....	.....	16	.....	1	.....	.....	.....	25
Bowie	2	.....	.....	.....	.....	1	.....	.....	1	1	.....	5
Lee	.....	3	.....	.....	.....	3	.....	.....	1	.....	.....	7
Lewis	.....	1	.....	.....	1	4	.....	.....	4	.....	.....	10
Sheridan	.....	.....	.....	.....	.....	2	.....	.....	1	.....	.....	3
Kearny	.....	3	.....	.....	.....	2	.....	.....	3	1	.....	9
Hancock	.....	29	.....	.....	.....	35	.....	.....	.....	2	.....	66
Upton	.....	3	.....	.....	3	20	.....	.....	2	.....	.....	28
Sevier	.....	2	.....	.....	1	1	.....	.....	.....	.....	.....	4
Logan	1	5	.....	1	1	2	.....	.....	.....	.....	.....	10
Humphreys	.....	2	.....	.....	.....	2	.....	1	4	.....	.....	9
Wheeler	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Syracuse	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wadsworth	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
Mac Arthur	.....	3	.....	.....	.....	.....	.....	.....	2	.....	.....	5
Eustis	.....	2	.....	.....	.....	1	.....	.....	1	.....	.....	4
Greenleaf	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Travis	1	4	.....	.....	1	6	.....	.....	1	.....	.....	13
Forrest	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Total	24	211	6	1	35	297	1	16	125	22	3	741

TABLE 69.—*Deaths, special infectious diseases by camps, colored enlisted men, 1919—Absolute numbers.*

Camps.	Measles.	Influenza.	Mumps.	Meningitis.	Pneumonia.	Tuberculosis.	Other respiratory.	Total.
1918, remaining		10			20	59	2	91
McClellan					1	1		2
Pike					6	3		9
Fremont								
Johnston								
Gordon	1				1	10		12
Grant		1		1	1	2		5
Dodge		1			2	2	1	6
Funston		1			4	2		7
Taylor		1			2	1		4
Beauregard					1	1	1	3
Meade			1		2	7		10
Devens				1	1	1		3
Custer						3		3
Shelby						2		2
Dix					1	1		2
Cody								
Mills		2		1	2	1	1	7
Greene					1			1
Sherman		1			1	3		5
Doniphan								
Jackson				1	4	9		14
Bowie				1	2	3		6
Lee					1	6		7
Lewis								
Sheridan					2			2
Kearny								
Hancock		2						2
Upton				2	14	5		21
Sevier					2	3		5
Logan		1				1		2
Humphreys				1	3			4
Wheeler							1	1
Syracuse								
Wadsworth								
Mac Arthur						1		1
Eustis					1	1		2
Greenleaf								
Travis					1	3		4
Forrest								
Total	1	20	1	8	76	131	6	243

INFECTIOUS DISEASES.

GENERAL DISCUSSION.

Infectious diseases, the control of which had constituted the principal sanitary problem during the years 1917 and 1918, while the Army was being rapidly increased and while the camps in this country and in Europe were much overcrowded, began to diminish rapidly during the early part of 1919, as the war Army was demobilized. No recruits were added to the Army between November, 1918, and the early part of March, 1919. The majority of the men who were in the Army during that period had acquired either an absolute or a partial immunity to the various infectious diseases through exposure to them during the preceding months. When the recruiting of the Army was resumed in March, the usual season for the greatest spread of the infectious disease had passed. It was consequently to be expected that such cases of them as occurred during the summer and the early fall would be sporadic rather than epidemic in character. Little increase in the rates were to be expected before the beginning of the cold weather in November or December.

Demobilization and recruiting, by months, 1919.

Months.	Demobilized.			Enlisted.
	White.	Colored.	Total.	
January	414,162	22,627	436,789	0
February	195,453	25,616	220,069	0
March	200,505	36,314	236,819	2,264
April	264,425	12,130	266,555	12,986
May	359,746	11,076	370,822	11,580
June	380,684	24,415	405,099	13,281
July	274,158	73,871	348,029	13,090
August	129,652	18,179	147,831	8,179
September	72,005	3,923	75,928	7,156
October	34,198	1,741	35,939	8,839
November	11,814	264	12,078	8,482
December	5,094	43	5,137	9,993

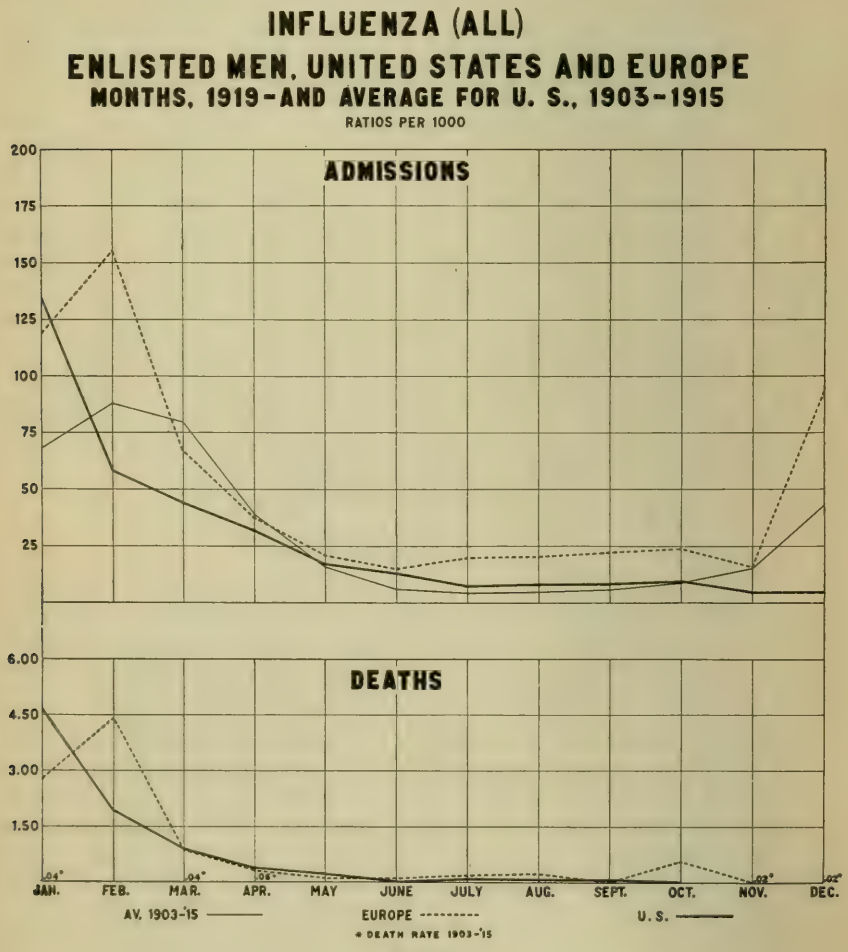


FIG. 30.

The above table shows the number of men, white and colored troops, demobilized during each month. It also shows the number of enlistments for each month. It will be observed, as stated, that few enlistments occurred before April, and that it was during the late spring and the summer months that the heaviest recruiting for the Army occurred. It was also during these months that a large number of men were demobilized, with resulting detection of hitherto concealed venereal disease. Consequently, it was to be expected that during this season there would be a large number of venereal diseases reported and a large number of men discharged on certificate of disability or with 10 per cent or more disability.

Influenza, Pneumonia, and Other Respiratory Diseases.

As was stated in the report of 1919, the vital statistics section of the Census Bureau and Public Health officers, in order to obtain an accurate estimate of an influenza epidemic, combine the cases and deaths resulting from pneumonias and the common types of respiratory diseases (such as rhinitis, tonsillitis, etc.) with those reported for influenza. Any rise above the normal rates is then attributed to influenza. This is the only way to obtain an estimate of the extent of an epidemic, as the diagnoses are so frequently confused.

Following this custom, first influenza, pneumonias, and other respiratory diseases are discussed separately, and afterwards the total for the group.

Influenza.—The overwhelming pandemic of influenza which had swept around the world in the latter part of 1918 was rapidly subsiding at the end of that year. Although this decline continued, the admission and death rates in the United States were both much above the average in January, 1919. However, both of these rates declined markedly after that month. From May the admission rates continued above the prewar average until the last two months of the year.

In Europe the rate in January was below that for the United States, but there was a decided increase in February for admissions and for deaths. After that month both rates declined, but at no time did the admission rates reach the low level maintained in the United States. The total admission rate for the year was 85.92 in Europe and 48.61 in the United States.

TABLE 70.—*Influenza—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	7,825	139.54	494	86.76	8,319	134.67	12,790	103.10	1,803	154.10	1,524	16,117	118.72
February	2,344	59.62	274	49.73	2,618	58.41	14,975	137.17	1,709	156.28	1,965	18,649	155.27
March	1,545	45.57	113	30.38	1,658	44.07	5,417	58.26	978	95.30	513	6,908	66.92
April	939	33.16	42	16.90	981	31.85	2,159	30.36	643	64.41	214	3,016	37.19
May	409	16.82	33	19.05	442	16.97	891	18.76	213	23.53	74	1,178	20.84
June	262	12.73	19	12.28	281	12.70	271	11.97	116	21.70	30	417	14.90
July	131	7.31	14	8.37	145	7.40	162	17.41	17	16.31	26	205	19.81
August	112	8.57	7	4.66	119	8.17	61	15.25	1	6.90	22	84	20.26
September	108	8.68	5	5.30	113	8.44	38	15.04	1	9.35	19	58	22.02
October	117	10.04	1	1.32	118	9.51	32	18.23	.....	.....	10	42	23.73
November	57	5.17	.....	.....	57	4.84	17	10.78	2	285.71	6	25	15.78
December	57	5.05	1	1.34	58	4.82	138	90.08	1	.....	3	142	92.69
Not stated	9	.....	2	.....	11	.....	88	.....	18	.....	24	130	.....
Total	13,915	49.71	1,005	37.17	14,920	48.61	37,039	75.87	5,502	93.90	4,430	46,971	85.92

DEATHS.

From cases remaining 1918	116	.....	13	.....	129	.....	19	.....	.....	.....	26	45	.....
1919.													
January	279	4.98	10	1.76	289	4.68	296	2.39	35	2.99	46	377	2.78
February	84	2.14	3	.54	87	1.94	454	4.16	38	3.47	37	529	4.40
March	31	.91	3	.81	34	.90	77	.83	9	.88	5	91	.88
April	12	.42	.....	.....	12	.39	21	.30	3	.30	3	27	.33
May	5	.21	1	.58	6	.23	5	.11	1	.11	.....	6	.11
June	.....	.....	.....	.....	.....	.....	2	.09	.....	.....	1	3	.11
July	2	.11	.....	.....	2	.10	1	.11	1	.96	.....	2	.19
August	1	.08	.....	.....	1	.07	1	.25	.....	.....	.....	1	.24
September	1	.08	.....	.....	1	.07	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	1	.57	.....	.....	.....	1	.56
Not stated	.....	.....	.....	.....	.....	.....	6	.....	2	.....	2	10	.....
Total 1919	415	1.48	17	.63	432	1.41	864	1.77	89	1.52	94	1,047	1.92
Total deaths, remaining cases 1918, and cases 1919	531	1.90	30	1.11	561	1.83	883	1.81	89	1.52	120	1,092	2.00

[1] There were no deaths for months that are omitted.

For the white troops in the United States the admission rate was higher than that for the colored, but, as in 1918, the rate for the colored troops in Europe, where the strength was estimated, was higher than that for the whites.

Pneumonias.—The admission rate for the pneumonias in the United States in January, 1919, showed a slight increase over the admission rate in December, 1918. After this month the rate dropped rapidly and was lower each month throughout the year than it had been in any corresponding month in 1918. The monthly rates were, however, higher than the prewar monthly rates throughout the year, until the month of October.

In Europe the January admission rate was also slightly higher than that for the preceding December, being 16.77, compared with 16.31. As in the case of influenza, the February pneumonia rate showed a

marked rise over the January rate, but after February the monthly admission rates declined, though practically throughout the year they were higher than the corresponding rates in the United States. There was a very marked increase in September, with some fall in October, followed by a pronounced rise in December.

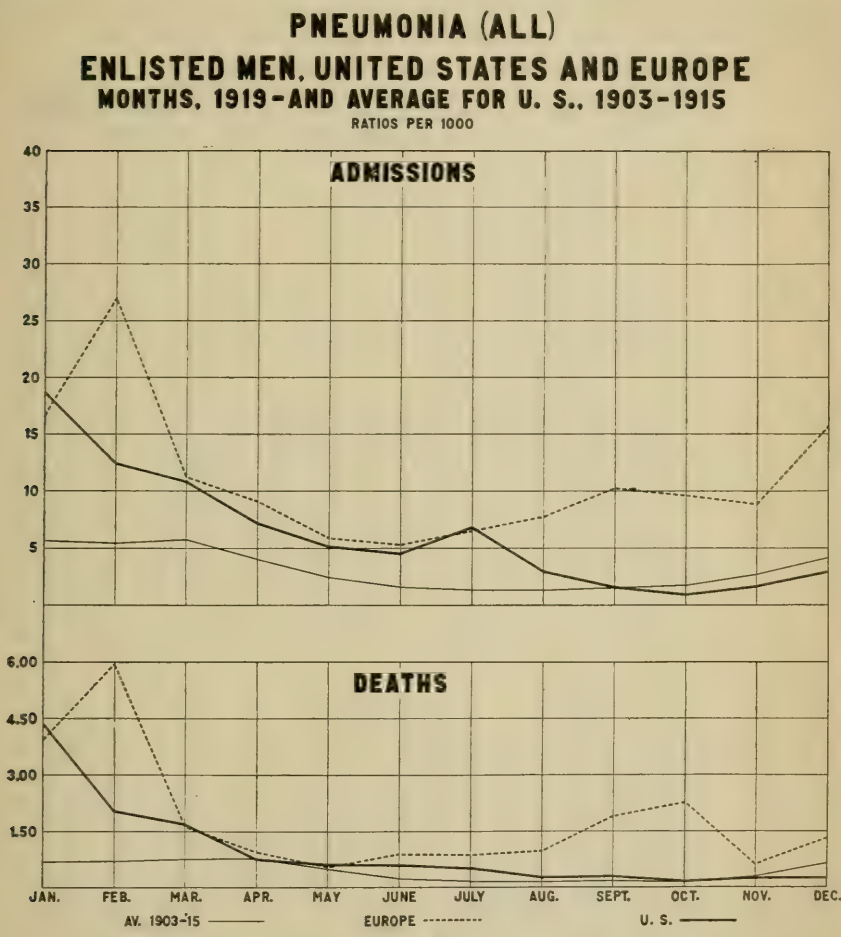


FIG. 31.

In both countries the admission rates for the Negro troops was much higher than the corresponding rates for the white troops. It is difficult to compare the death rates for January with those for the preceding December because many deaths occurring in 1919 among cases taken sick in December, 1918, have not yet been added to the December deaths. This will be done eventually for the historical work. Until this is done, however, the December death rates must be recognized as too low.

In January, 1919, the death rate in the United States showed an apparent increase over the November and December, 1918, rates. After this month they declined rapidly, and beginning with the

month of April approached rather closely the prewar rate. They actually fell below the prewar rate in November and December. In Europe the death rate showed an apparent increase in January over the preceding November and December rates. The February death rate, like the admission rate, showed a pronounced increase. After this month they declined, but remained higher throughout the year, except in March and May, than the corresponding rates in the United States. The total death rate was 3.19 per 1,000 in Europe and 1.93 in the United States.

TABLE 71.—*Pneumonia—Admissions and deaths, enlisted men, United States and Europe, by months, 1919.*

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	888	15.84	266	46.72	1,154	18.68	1,605	12.94	522	41.61	136	2,263	16.67
February	336	8.55	220	39.93	556	12.40	2,426	22.22	647	59.16	163	3,236	26.94
March	266	7.85	142	38.17	408	10.84	824	8.86	246	23.97	89	1,159	11.23
April	182	6.43	39	15.69	221	7.17	461	6.48	219	21.94	56	736	9.08
May	117	4.81	17	9.82	134	5.14	196	4.13	110	12.15	27	333	5.89
June	73	3.55	26	16.81	99	4.48	68	3.00	74	13.84	6	148	5.29
July	74	4.13	59	35.29	133	6.79	49	5.27	15	14.40	3	67	6.48
August	37	2.83	6	4.00	43	2.95	26	6.50	2	13.79	4	32	7.72
September	20	1.61	1	1.06	21	1.57	15	5.94	1	9.35	11	27	10.25
October	10	.86	1	1.32	11	.89	10	5.70	.....	.....	7	17	9.60
November	15	1.36	4	5.46	19	1.61	12	7.61	2	285.71	.....	14	8.84
December	26	2.30	9	12.08	35	2.91	22	14.36	1	.....	1	24	15.67
Not stated	4	.....	3	.....	7	.....	62	.....	22	.....	1	85	.....
Total	2,048	7.32	793	29.33	2,841	9.26	5,776	11.83	1,861	31.76	504	8,141	14.89

DEATHS.

From cases remaining 1918	70	.....	21	.....	91	.....	25	.....	7	.....	99	131	.....
1919.													
January	234	4.17	36	6.32	270	4.37	392	3.16	92	7.86	47	531	3.91
February	68	1.73	23	4.17	91	2.03	545	4.99	99	9.05	70	714	5.94
March	47	1.39	17	4.57	64	1.70	130	1.40	26	2.53	12	168	1.63
April	19	.67	4	1.61	23	.75	45	.63	21	2.10	11	77	.95
May	14	.58	2	1.15	16	.61	18	.38	9	.99	4	31	.55
June	10	.49	3	1.94	13	.59	14	.62	8	1.50	3	25	.89
July	7	.39	3	1.79	10	.51	8	.86	1	.96	.....	9	.87
August	3	.23	1	.67	4	.27	3	.75	.....	.....	1	4	.96
September	3	.24	1	1.06	4	.30	.....	.....	.....	.....	5	5	1.90
October	2	.17	.....	.....	2	.16	.....	.....	.....	.....	4	4	2.26
November	2	.18	1	1.36	3	.25	1	.63	.....	.....	.....	1	.63
December	3	.27	.....	.....	3	.25	2	1.31	.....	.....	.....	2	1.31
Not stated	2	.....	.....	.....	2	.....	27	.....	17	.....	1	45	.....
Total, 1919	414	1.48	91	3.37	505	1.65	1,185	2.43	273	4.66	158	1,616	2.96
Total deaths, remaining cases 1918, and cases 1919	484	1.73	112	4.14	596	1.93	1,210	2.48	280	4.78	257	1,747	3.19

Other respiratory.—The monthly admission rates for the common types of respiratory diseases ran high throughout the year in the United States. For each month they were higher than the average for the prewar period. For January the rate was 343.05, as com-

pared with 247.45 for December. After this the rates declined, but remained abnormally high throughout the year. The total for the year was 208.94, as compared with 190.03 in 1918. In Europe the admission rates for this type of disease was also high throughout the year, but not so high as the corresponding rates in the United States until the latter part of the year. For January, 1919, it was practically the same as that for December, 1918, but there was a marked

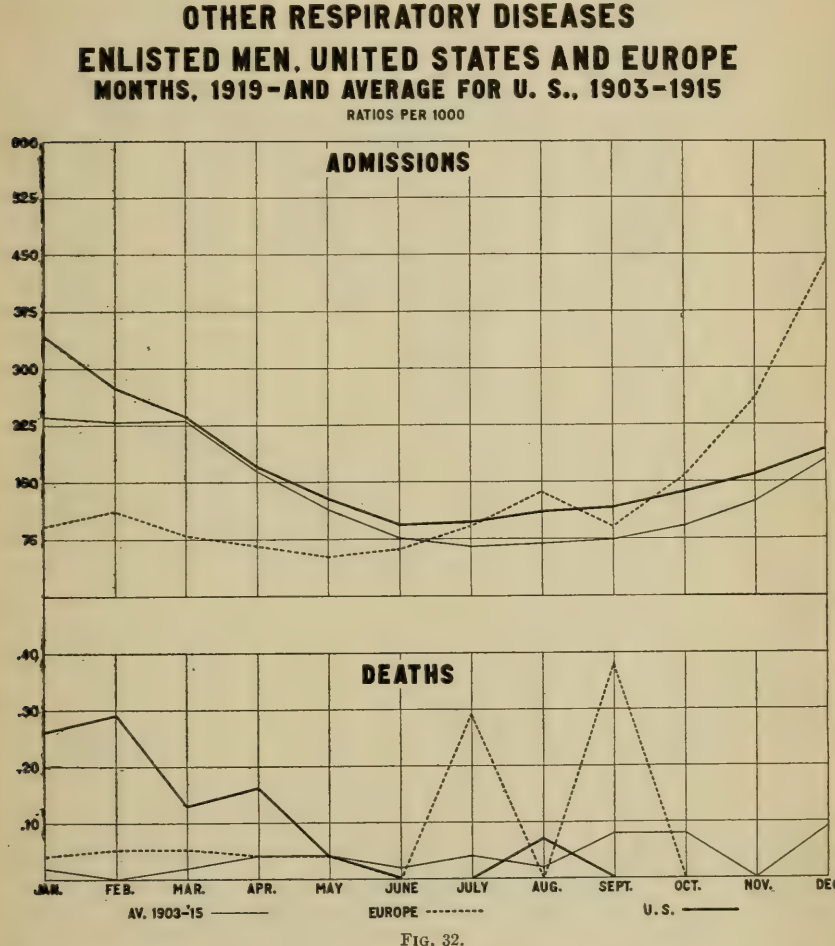


FIG. 32.

increase in February. After this month the rates declined, to rise again in August, which rise was followed by fall in September, which was in turn followed by a pronounced rise in October. This rise continued in November, and in December it reached the rate of 441.25. For the year the rate was 87.10, as compared with 65.44 in 1918. In the United States the rate for the whites was higher than that for the colored. As in the case of influenza, the rates in Europe for the colored were higher than those for the white.

TABLE 72.—*Common respiratory diseases—Admission and deaths, enlisted men, United States and Europe, by months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.					
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	19,417	346.25	1,774	311.56	21,191	343.05	10,663	85.95	872	74.52	1,047	12,582	92.68
February	10,858	276.16	1,456	264.29	12,314	274.70	11,222	102.79	1,139	104.16	1,086	13,447	111.96
March	8,011	236.29	917	246.51	8,928	237.30	6,889	74.09	875	85.26	534	8,298	80.39
April	4,884	172.46	381	153.32	5,265	170.91	4,201	59.08	829	83.04	342	5,372	66.24
May	3,150	129.53	197	113.74	3,347	128.49	2,133	44.92	591	65.27	181	2,905	51.38
June	1,954	94.97	134	86.62	2,088	94.39	1,230	54.34	383	71.63	105	1,718	61.40
July	1,706	95.17	196	117.22	1,902	97.06	781	83.95	106	101.73	60	947	91.53
August	1,552	118.78	61	40.64	1,613	110.73	517	129.22	17	117.24	32	566	136.52
September	1,501	120.59	64	67.80	1,565	116.88	227	89.86	6	56.07	7	240	91.11
October	1,633	140.09	66	87.19	1,699	136.87	275	156.69	.....	.....	3	278	157.06
November	1,822	165.13	51	69.44	1,873	159.18	407	258.08	1	142.86	2	410	258.84
December	2,233	197.86	86	115.44	2,319	192.74	673	439.30	1	.....	2	676	441.25
Not stated	31	.....	1	.....	32	.....	142	.....	15	.....	19	176	.....
Total	58,752	209.88	5,384	199.13	64,136	208.94	39,360	80.64	4,835	82.52	3,420	47,615	87.10

DEATHS.

From cases remaining, 1918	17	.....	3	.....	20	.....	5	.....	1	.....	.....	6	.....
1919.													
January	15	0.27	1	0.18	16	0.26	2	0.02	1	0.09	3	6	0.04
February	12	.31	1	.18	13	.29	5	.05	1	.09	.....	6	.05
March	4	.12	1	.27	5	.13	2	.02	1	.10	2	5	.05
April	4	.14	1	.40	5	.16	3	.04	.....	.....	.....	3	.04
May	1	.04	.....	.....	1	.04	2	.04	.....	.....	.....	2	.04
June	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July	.....	.....	.....	.....	.....	.....	2	.21	1	.96	.....	3	.29
August	1	.08	.....	.....	1	.07	.....	.....	.....	.....	.....	.....	.....
September	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.38
Not stated	1	.....	.....	.....	1	.....	6	.....	.....	.....	.....	6	.....
Total 1919	38	.14	4	.15	42	.14	22	.05	5	.09	5	32	.06
Total deaths, remaining cases 1918, and cases 1919	55	.20	7	.26	62	.20	27	.06	6	.10	5	38	.07

[1] There were no deaths for months that are omitted.

Total respiratory.—It remains to consider the total of the three preceding groups of diseases. Throughout the year other than for March, until the month of December the admission rates for the total respiratory diseases in the United States were much higher than the prewar rates. They were, however, lower throughout the year than the corresponding monthly rates in 1918. In January the rate rose to 496.90 from 412.92 in the preceding December. After this month the rates declined, but remained, as stated, above normal except for March until December. In Europe the admission rate in January showed some decrease from that of the preceding December, but in February, as for influenza and the pneumonias, there was a decided increase. This was in turn followed by a decrease, which continued until the rise in the midsummer began, which continued, with a drop in September, until the high point of 549.61 was reached in December. It is interesting to note that this was higher than any monthly European rate for 1918.

For this combined group of diseases the admission rates in the United States for the white and colored were practically the same, but in Europe the rates for the colored were higher than for the white. The total rate for the United States was 266.81, as compared with 187.90 in Europe. For deaths the January rate in the United States was 9.31, which was apparently higher than for December, 1918. After this month the death rates declined, though they remained above

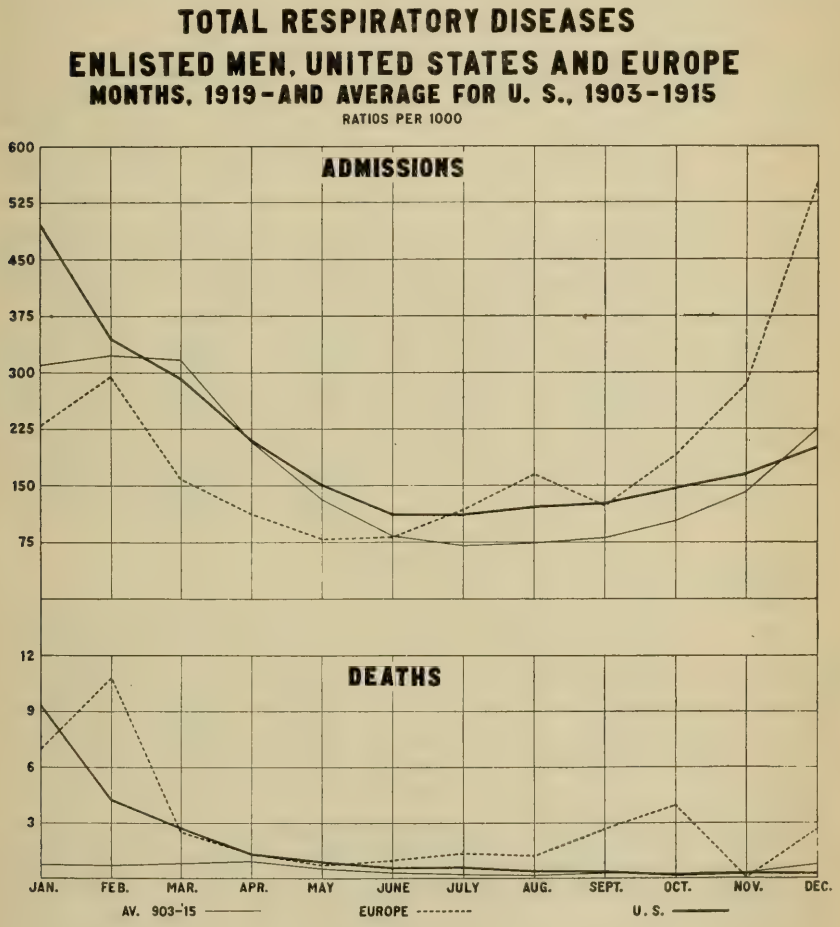


FIG. 33.

the prewar average until the month of October, when they fell below it. They were, however, after February throughout the year lower than the corresponding rates for the year 1918. In Europe these rates showed an apparent increase in January, 1919, over December, 1918, but a decrease over the November, 1918, rate. They, however, rose in February to 10.78, but after that time declined, to again rise in the month of July. It is of interest to note that though the highest admission rate occurred in December, the death rate that

month was much lower than for several other months. This fact seems to be evidence of the mild character of the prevailing type of respiratory diseases at that time. The death rate in the United States was 3.97 and in Europe 5.37. As is usual for these diseases, the death rates for the Negro troops were higher than those of the white in both countries.

TABLE 73.—*Total respiratory diseases—Admissions and deaths, enlisted men, United States and Europe, by months, 1919.*

ADMISSIONS.

Months.	United States.						Europe.					
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	28,130	501.62	2,534	445.03	30,664	496.40	25,058	201.99	3,197	273.24	2,707	30,962	228.06
February	13,538	344.32	1,950	353.97	15,488	345.51	28,623	262.18	3,495	319.62	3,214	35,332	294.16
March	9,822	289.71	1,172	315.05	10,994	292.21	13,130	141.22	2,099	204.52	1,136	16,365	158.53
April	6,005	212.04	462	185.92	6,467	209.93	6,821	95.92	1,691	169.39	612	9,124	112.50
May	3,676	151.16	247	142.61	3,923	150.60	3,220	67.81	914	100.95	282	4,416	78.10
June	2,289	111.25	179	115.71	2,468	111.56	1,569	69.32	573	107.16	141	2,283	81.59
July	1,911	106.61	269	160.89	2,180	111.24	992	106.63	138	132.44	89	1,219	117.83
August	1,701	130.19	74	49.30	1,775	121.85	604	150.96	20	137.93	58	682	164.50
September	1,629	130.87	70	74.15	1,699	126.89	280	110.85	8	74.76	37	325	123.38
October	1,760	150.99	68	89.82	1,828	147.26	317	180.63	.....	.....	20	337	190.40
November	1,894	171.66	55	75.03	1,949	165.64	436	276.47	5	714.29	8	449	283.45
December	2,316	205.19	96	128.86	2,412	200.48	833	543.73	3	.....	6	842	549.61
Not stated	44	.....	6	.....	50	.....	292	.....	55	.....	44	391	.....
Total	74,715	266.90	7,182	265.64	81,897	266.81	82,175	168.35	12,198	208.16	8,354	102,727	187.90

DEATHS.

From cases remaining 1918	203	.....	37	.....	240	.....	48	.....	8	.....	125	181	.....
1919.												
January	528	9.42	47	8.25	575	9.31	719	5.80	128	10.94	96	943	6.95
February	164	4.17	27	4.90	191	4.26	1,050	9.62	138	12.62	107	1,295	10.78
March	82	2.42	21	5.65	103	2.74	203	2.18	36	3.51	19	258	2.50
April	35	1.24	5	2.01	40	1.30	68	.96	24	2.40	14	106	1.31
May	20	.82	3	1.73	23	.88	24	.51	10	1.10	4	38	.67
June	10	.49	3	1.94	13	.59	15	.66	8	1.50	4	27	.96
July	9	.50	3	1.79	12	.61	11	1.18	3	2.88	.....	14	1.35
August	5	.38	1	.67	6	.41	4	1.00	.....	.....	1	5	1.21
September	4	.32	1	1.06	5	.37	1	.40	1	9.35	5	7	2.66
October	2	.17	.....	.....	2	.16	3	1.71	.....	.....	4	7	3.95
November	2	.18	1	1.36	3	.25	.....	.....	.....	.....	.....	.....	.....
December	3	.27	.....	.....	3	.25	4	2.61	.....	.....	.....	4	2.61
Not stated	3	.....	.....	.....	3	.....	30	.....	19	.....	3	52	.....
Total, 1919	867	3.10	112	4.14	979	3.19	2,132	4.37	367	6.26	257	2,756	5.04
Total deaths, remaining cases 1918, and cases, 1919	1,070	3.82	149	5.51	1,219	3.97	2,180	4.47	375	6.40	382	2,937	5.37

A rather accurate comparison of the prevalence of influenza and pneumonia during the 1918 epidemic and during normal years can now be made between troops in the United States and the civilian population.

Statistics of the Metropolitan Life Insurance Co., with a policy-holding population of 12,000,000, show that the annual death rates per 1,000 during the three-month period October to December, 1918,

for *male whites* between the ages of 20 and 29 was 30.77. The draft age was 21 to 31 years, so that the majority of the Army in the United States was composed of men of these ages. Consequently, if the same rates prevailed in the Army during the 1918 epidemic as among civilians represented by the 12,000,000 policyholders of the Metropolitan Life Insurance Co., the death rate for white soldiers for the three-month period October to December, 1918, taking the age and sex factors into consideration, should be more than 30.75 (ages 20 to 29) and less than 39.77 (ages 25 to 34). As a matter of fact, the actual death rate for the 1,257,802 white troops in the United States at that time was 42.98 when you include, with influenza and the pneumonias complicating influenza, all other deaths due to pneumonia and all of the common respiratory diseases (bronchitis, acute coryza, laryngitis, nasopharyngitis, pharyngitis, rhinitis, acute tonsilitis and pleurisy).

Furthermore, during normal years for the annual period, the civilian death rate for total respiratory (ages 20 to 39 male whites) in terms of the annual rate per 1,000 is 0.8 (1911–1917 Metropolitan Life Insurance Co.), and the Army (troops in the United States, 1903–1915, inclusive) death rate is 0.4 (for total respiratory).

The above comparison of the Army rates with the figures issued by the Metropolitan Life Insurance Co. is somewhat unfair to the latter because the Army September rates are higher than theirs. This is due to the fact that we tabulate our deaths by the "admission date" while they use the actual "date of death." The epidemic began in September, but few deaths occurred prior to October. A few of the United States Census Bureau's figures are now available and this error can be avoided by using the entire four-month period September 1 to December 31, 1918, as a basis for comparison:

Deaths, influenza and pneumonia, for period Sept. 1 to Dec. 31, 1918—Annual rates per 1,000.

United States Census Bureau mortality statistics:	
Indianapolis	12.24
Kansas City	18.32
Philadelphia	35.64
Army, United States	46.24
Surgeon General's Office, annual report for 1919:	
Army, Europe	20.74
Army, United States and Europe	31.96

These rates for the cities are obtained by adding the rates for the various ages (21 to 34) and dividing them by the number of years.

The Army rates for the four-month period, United States and Europe, are obtained by using the four months deaths and the four months strength.

There is an additional factor which should be considered. The Army rates are based on a mean strength, which owing to the large number going to France during those months is much lower for troops in the United States than the actual number of men from whom these cases were drawn. This results in making the rate for the Army in the United States higher than it actually was. For this reason the rate for the Army in the United States and Europe combined is the truest rate for purposes of comparison. This analysis leads one to the conclusion that during the 1918 epidemic

the Army rate was near that of the civilian population, and that during normal periods the Army rate is considerably below the civilian rate, provided one confines the comparison to that group of civilians which corresponds to the Army in age and sex. The fact that these factors were not taken into consideration (statistics not being available earlier) accounts for the statements one frequently

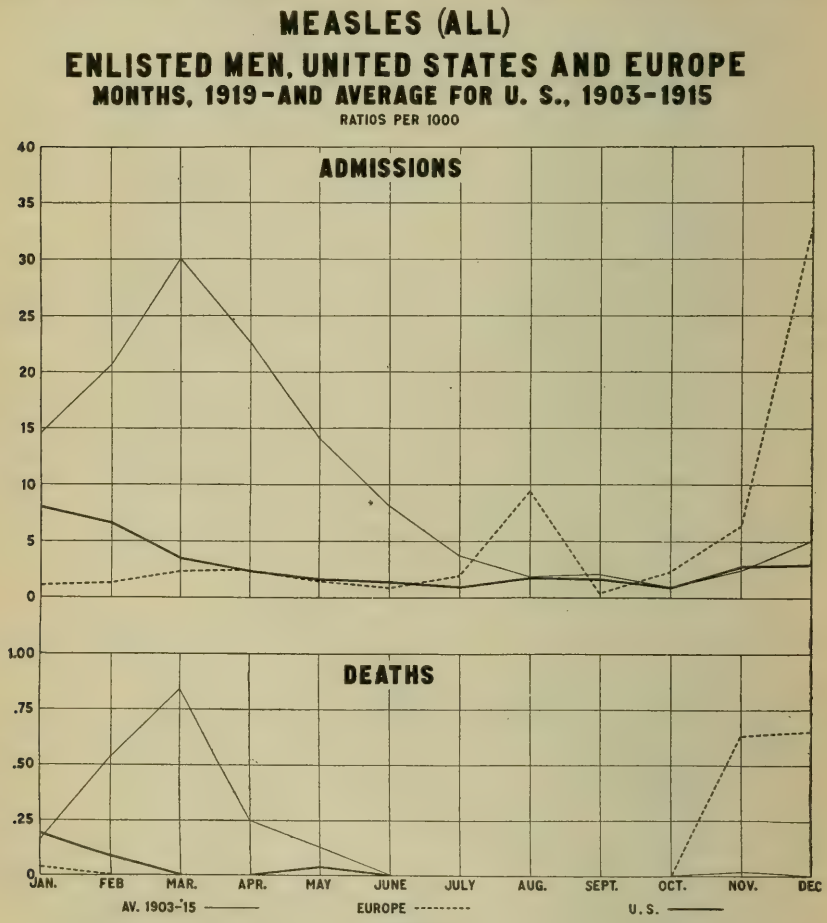


FIG. 34.

sees that influenza and pneumonia were much more prevalent in the Army during the 1918 epidemic than among the civilian population.

MEASLES.

During 1917 this disease stood first as a cause of deaths for troops serving in the United States. With its complications it was charged with 947 deaths. It had swept through all the camps, causing a total of 47,573 admissions. During 1918 it caused 38,846 admissions in the United States, 38,447 of which occurred among enlisted men, and it stood fourth as the cause of deaths, with its complications being charged with 1,144 deaths. Actually, however, although there

were more deaths in 1918, the rate was only about one-half of that for the year 1917, as the strength was much larger in the latter year.

Since no new recruits (which represented the susceptible material) were added to the Army during the first two months of 1919 and few before the month of April, the number of cases and the rate showed a very marked decline from the prewar rates during the early part of the year. Instead of the rate rising in January, February, and March, and then falling slowly during the late spring and early summer months to again rise during the late fall and early winter months, remained below normal throughout the year. During the entire year it was the cause of little concern to the Army sanitary authorities.

In Europe the monthly rates were also below the normal until the month of August, when they, like the rates for other infectious diseases, showed a sharp increase. In September there was a reduction, but in October the rate began to rise and reached the high point for the year in December. These increases were no doubt due to new recruits being added to the Army of Occupation in Germany.

For some reason which is not apparent, the admission rate was higher in the United States for the colored troops than for the white. Thirty-eight deaths in the United States and 11 in Europe were charged to this disease.

TABLE 74.—*Measles—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	410	7.31	85	14.93	495	8.01	129	1.04	8	0.68	10	147	1.08
February	237	6.03	59	10.71	296	6.60	142	1.30	3	.27	7	152	1.27
March	122	3.60	10	2.69	132	3.51	204	2.19	11	1.07	21	236	2.29
April	68	2.40	4	1.61	72	2.34	177	2.49	5	.50	11	193	2.38
May	41	1.69	2	.12	43	1.65	78	1.64	2	.22	2	82	1.45
June	29	1.41	1	.65	30	1.36	15	.66	6	1.12	3	24	.86
July	18	1.00	.....	.....	18	.92	18	1.93	.....	.....	2	20	1.93
August	25	1.91	.....	.....	25	1.72	37	9.25	.....	.....	2	39	9.41
September	22	1.77	.....	.....	22	1.64	1	.40	.....	.....	.....	1	.38
October	11	.94	.....	.....	11	.89	3	1.71	.....	.....	1	4	2.26
November	32	2.90	.....	.....	32	2.72	9	.57	.....	.....	1	10	6.31
December	33	2.92	2	2.68	35	2.91	50	32.64	.....	.....	.....	50	32.64
Total	1,048	3.74	163	6.03	1,211	3.95	863	1.77	35	.60	60	958	1.75

DEATHS.

From cases remaining 1918	21	.....	.....	.....	21	.....	2	.....	.....	.....	1	3	.....
1919.													
January	9	0.16	3	0.53	12	0.19	6	0.05	.....	.....	.....	6	0.04
February	4	.10	.....	.....	4	.09	.....	.....	.....	.....	.....	.....	.....
May	1	.04	.....	.....	1	.04	.....	.....	.....	.....	.....	.....	.....
November	.....	.....	.....	.....	.....	.....	1	.63	.....	.....	.....	1	.63
December	.....	.....	.....	.....	.....	.....	1	.65	.....	.....	.....	1	.65
Total 1919	14	.05	3	.11	17	.06	8	.02	.....	.....	.....	8	.01
Total deaths, remaining cases 1918, and cases 1919	35	.13	3	.11	38	.12	10	.02	.....	.....	1	11	.02

[1] There were no deaths for months that are omitted.

Mumps.

Mumps, which had merited serious consideration by the sanitary authorities of the Army during the year 1918 on account of the large number of admissions and the great loss of time occasioned by it, stood third as a cause of admissions for enlisted men serving at home during 1919. The total number of cases for enlisted men in the

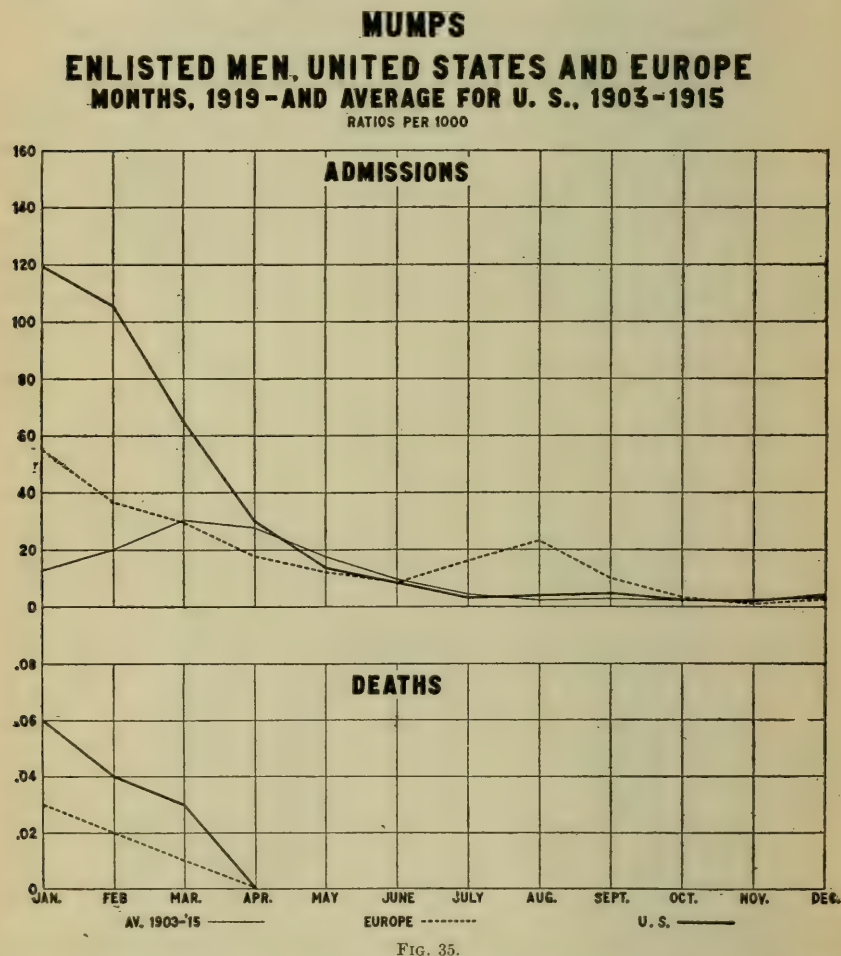


FIG. 35.

United States was 16,360, a rate of 53.30, and 6.8 per cent of the total admissions. Among United States troops in Europe there were 17,771 cases, a rate of 32.50. As a cause of the loss of time, it stood fourth for enlisted men in the United States. The number of days lost amounted to 292,754, making a noneffective rate of 2.61. The time lost amounted to 4.5 per cent of the total time lost for diseases. Among United States troops in Europe the loss of time amounted to 330,931 days, a rate of 1.66.

Due to the fact that no men were enlisted in the Army during the first two months of the year and comparatively few during the early spring months, the admission rate for this disease, both in the United States and in Europe, was much below most of the corresponding monthly rates for the preceding year. In the United States there had been some increase in the number of admissions during the latter part of 1918. This increase continued during January, but began to decline in February, and after that month the decline in the number of cases was rapid. In Europe there had also been an increase in the number of cases during the latter part of 1918. There was a material reduction in January, 1919, the rate dropping from 72.43 in December, 1918, to 55.51. For the year the total admission rate for enlisted men in the United States was 53.30, as compared with the corresponding rate of 32.51 in Europe.

As had been the case during the preceding year, the rate for the colored in the United States was much higher than that for the white, it being 90.92, as compared with 49.66. In Europe, where the strength for the white and colored was estimated, the rate was slightly lower for the colored, being 22.51 for the colored and 31.04 for the white. There were only 10 deaths charged against this disease in the United States in 1919 and 7 in Europe.

As compared with the prewar rate, the monthly admission rate in the United States was much higher during January and February, and twice as high in March. It then declined rapidly to approach the prewar average. It was also higher in Europe during January and February, but after that time it declined to below the prewar rate until July, when it increased, this increase being followed by an additional rise in August. In September there was a decrease. The preceding increase was probably due to the new recruits being sent to Europe for the Army of Occupation in Germany.

TABLE 75.—*Mumps—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio
January	6,029	107.51	1,357	238.32	7,386	119.57	6,399	51.58	549	46.92	587	7,535	55.51
February	3,972	101.02	766	139.05	4,738	105.70	3,835	35.13	271	24.78	315	4,421	36.81
March	2,254	66.48	194	52.15	2,448	65.07	2,648	28.48	232	22.61	201	3,081	29.84
April	843	29.77	93	37.42	936	30.39	1,220	17.16	120	12.02	108	1,448	17.85
May	344	14.15	20	11.55	364	13.97	539	11.35	112	12.37	41	692	12.24
June	172	8.36	16	10.34	188	8.50	198	8.75	32	5.98	10	240	8.58
July	56	3.12	8	4.78	64	3.27	153	16.45	1	.96	13	167	16.14
August	56	4.29	.....	.....	56	3.84	94	23.49	.....	.....	2	96	23.15
September	62	4.98	1	1.06	63	4.70	24	9.50	.....	.....	3	27	10.25
October	31	2.66	.....	.....	31	2.50	3	1.71	.....	.....	3	6	3.39
November	24	2.18	2	2.73	26	2.21	1	.63	.....	.....	1	2	1.26
December	52	4.61	1	1.34	53	4.41	2	1.31	.....	.....	2	4	2.61
Not stated	7	.....	.....	.....	7	.....	37	.....	2	.....	13	52	.....
Total	13,902	49.66	2,458	90.92	16,360	53.30	15,153	31.04	1,319	22.51	1,299	17,771	32.51

[1] There were no deaths for months that are omitted.

TABLE 75.—*Mumps—Admissions and deaths, enlisted men, United States and Europe, months, 1919*—Continued.

DEATHS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
From cases remaining 1918	2	.....	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....
1919.													
January	4	0.07	.....	.....	4	0.06	3	0.02	1	0.09	.....	4	0.03
February	.....	.....	2	0.36	2	.04	1	.01	1	.09	.....	2	.02
March	1	.03	.....	.....	1	.03	1	.01	.....	.....	.....	1	.01
Total, 1919	5	.02	2	.07	7	.02	5	.01	2	.03	.....	7	.01
Total deaths, remaining cases 1918, and cases 1919	7	.03	3	.11	10	.03	5	.01	2	.03	.....	7	.01

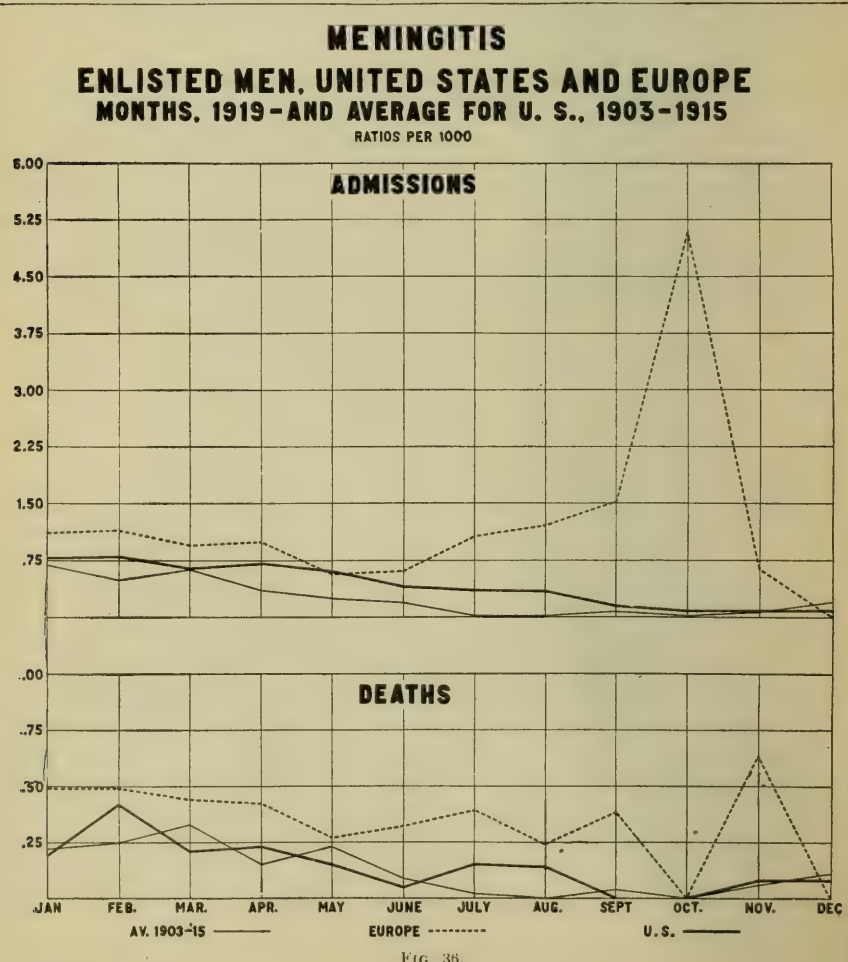


FIG. 36.

Meningitis.

Normally the admission rate for epidemic meningitis in the Army is very low, sporadic cases occurring here and there with an occasional small epidemic. The disease is one, however, that is always viewed with apprehension on account of the high case mortality attending it. During the years 1917 and 1918 a limited number of cases occurred among our troops, both in this country and in Europe. During the year 1919 the monthly admission rates in the United States rather closely paralleled the corresponding rates for the prewar period. In Europe, however, the incidence was higher than in the United States, the total rate for the year being 1.00, as compared with 0.57 in the United States. There were 74 deaths charged to this disease in the United States and 245 in Europe.

As was true in the preceding years, both the admission and death rates were higher for the colored troops than for the whites.

When sporadic cases occur, the diagnoses are made late, thereby delaying the serum treatment, which consequently has little curative effect. The case mortality is therefore higher among sporadic cases than it is when epidemics occur. Then the diagnoses are promptly made and all individuals with suspicious, or even indefinite, symptoms are considered as suspects. Consequently, cases are treated promptly with serum.

Table 76.—*Epidemic cerebrospinal meningitis—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	45	0.80	3	0.53	48	0.78	129	1.04	16	1.37	6	151	1.11
February	25	.64	11	2.00	36	.80	116	1.06	11	1.01	10	137	1.14
March	17	.50	7	1.88	24	.64	85	.91	9	.88	4	98	.95
April	21	.74	1	.40	22	.71	67	.94	10	1.00	3	80	.99
May	16	.66	.....	.....	16	.61	23	.48	7	.77	2	32	.57
June	9	.44	.....	.....	9	.41	10	.44	6	1.12	1	17	.61
July	7	.39	.....	.....	7	.36	10	1.07	1	.96	.....	11	1.06
August	5	.38	.....	.....	5	.34	5	1.25	.....	.....	.....	5	1.21
September	2	.16	.....	.....	2	.15	4	1.58	.....	.....	.....	4	1.52
October	1	.09	.....	.....	1	.08	9	5.13	.....	.....	.....	9	5.08
November	1	.09	.....	.....	1	.08	1	.63	.....	.....	.....	1	.63
December	1	.09	.....	.....	1	.08	.....	.....	.....	.....	.....	.....	.....
Not stated	2	.....	.....	.....	2	.....	.....	.....	1	.....	.....	1	.....
Total	152	.54	22	.81	174	.57	459	.94	61	1.04	26	546	1.00

[1] There were no deaths for the months that are omitted.

TABLE 76.—*Epidemic cerebrospinal meningitis—Admissions and deaths, enlisted men, United States and Europe, months, 1919*—Continued.

DEATHS.[1]

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
From cases remaining 1918	14	.....	2	.....	16	.....	3	.....	1	.....	3	7	.....
1919.													
January	11	0.20	1	0.18	12	0.19	53	0.43	7	0.60	7	67	0.49
February	12	.31	7	1.27	19	.42	43	.39	6	.55	10	59	.49
March	5	.15	3	.81	8	.21	38	.41	4	.39	3	45	.44
April	6	.21	1	.40	7	.23	23	.32	9	.90	2	34	.42
May	4	.16	.....	.....	4	.15	10	.21	4	.44	1	15	.27
June	1	.05	.....	.....	1	.05	4	.18	5	.94	.....	9	.32
July	3	.17	.....	.....	3	.15	3	.32	1	.96	.....	4	.39
August	2	.15	.....	.....	2	.14	1	.25	.....	.....	.....	1	.24
September	.....	.....	.....	.....	.....	.....	1	.40	.....	.....	.....	1	.38
November	1	.09	.....	.....	1	.08	1	.63	.....	.....	.....	1	.63
December	1	.09	.....	.....	1	.08	.....	.....	.....	.....	.....	.....	.....
Not stated	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	2	.....
Total, 1919	46	.16	12	.44	58	.19	178	.36	36	.61	24	238	.44
Total deaths, remaining cases 1918, and cases 1919	60	.21	14	.52	74	.24	181	.37	37	.63	27	245	.45

[1] There were no deaths for the month that is omitted.

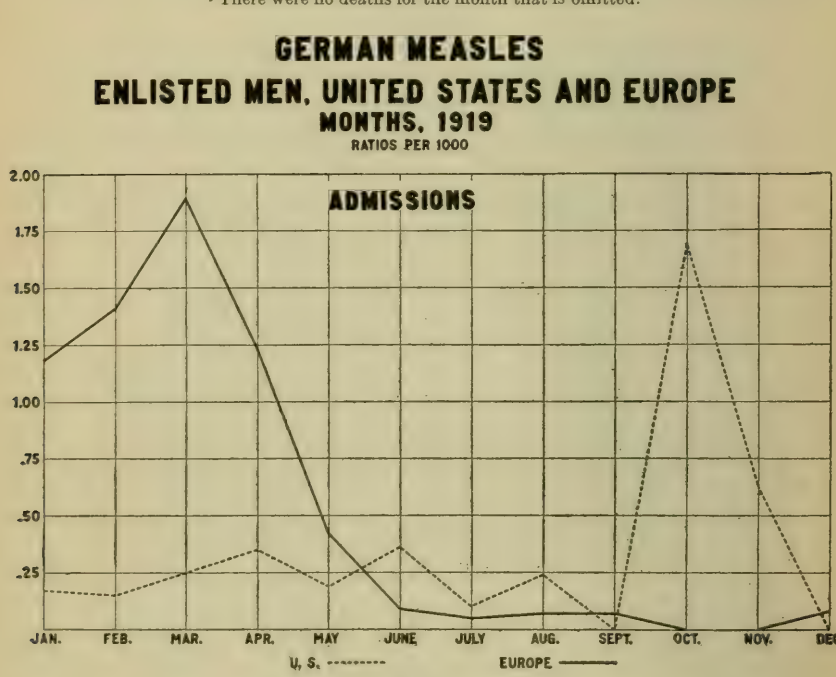


FIG. 37.

German Measles.

German measles, which was the cause of some concern to the medical authorities of the Army during 1917 and 1918, largely due to the difficulty in differentiating it from measles, was of little sanitary importance in 1919. Only 248 cases were reported in the United States and 104 in Europe. No death was attributed to it or its complication. As in 1917 and 1918, the admission rate for the white troops was higher than for colored troops.

TABLE 77.—*German measles—Admissions by months, 1919, enlisted men, United States and Europe.*

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	67	1.19	6	1.05	73	1.18	22	0.18	.....	.....	1	23	0.17
February	62	1.58	1	.18	63	1.41	16	.15	.....	.....	2	18	.15
March	66	1.95	5	1.34	71	1.89	23	.25	1	0.10	2	26	.25
April	36	1.27	2	.80	38	1.23	18	.25	.....	.....	10	28	.35
May	11	.45	.....	.....	11	.42	10	.21	.....	.....	1	11	.19
June	2	.10	.....	.....	2	.09	9	.40	.....	.....	1	10	.36
July	1	.06	.....	.....	1	.05	1	.11	.....	.....	.....	1	.10
August	1	.08	.....	.....	1	.07	1	.25	.....	.....	.....	1	.24
September	1	.08	.....	.....	1	.07	.....	.....	.....	.....	.....	.....	.....
October	.....	.....	.....	.....	.....	.....	3	1.71	.....	.....	.....	3	1.69
November	.....	.....	.....	.....	.....	.....	1	.63	.....	.....	.....	1	.63
December	1	.09	.....	.....	1	.08	.....	.....	.....	.....	.....	.....	.....
Total	248	.89	14	.52	262	.85	104	2.13	1	.02	17	122	.22

Diphtheria.

Prior to the war diphtheria was considered as rather an insignificant disease from the medico-military point of view. During the war experience showed that it merited serious consideration. In 1919 in the United States it caused the admission of 805 enlisted men to hospitals and in Europe 1,264. It also caused the death of 16 enlisted men in the United States and 22 in Europe. As in 1918, the rate for the white troops in the United States was much higher than that for the colored troops. This was also true for the white and colored troops in Europe. The admission rate in the United States during the latter part of the year 1918 had shown some tendency to increase. This increase continued during January, February, and March, 1919, when it reached 4.55 per 1,000, the peak for the year. In Europe the rate also increased in December, 1918, over that for the preceding months. This increase continued in January, when it was 2.29. There was a decline in February, March, and April. In May, June, July, and August the rate increased, to be followed by a decrease in September and by a decided increase in October and November, which continued into December, reaching the high point of the year, 14.26. The increase during the summer and the late fall, as in the case of the other infectious diseases, was probably due to recruits joining the Army of Occupation in Germany. Through-

out the year until November the monthly admission rates for the United States were higher than the corresponding rates for the years 1903 to 1915. The current statistics show that during the first six months of 1920 there was a decided decrease in the rates as compared to the rates for the months of 1919. One striking feature in the behavior of diphtheria manifested in the war is still shown by it. Al-

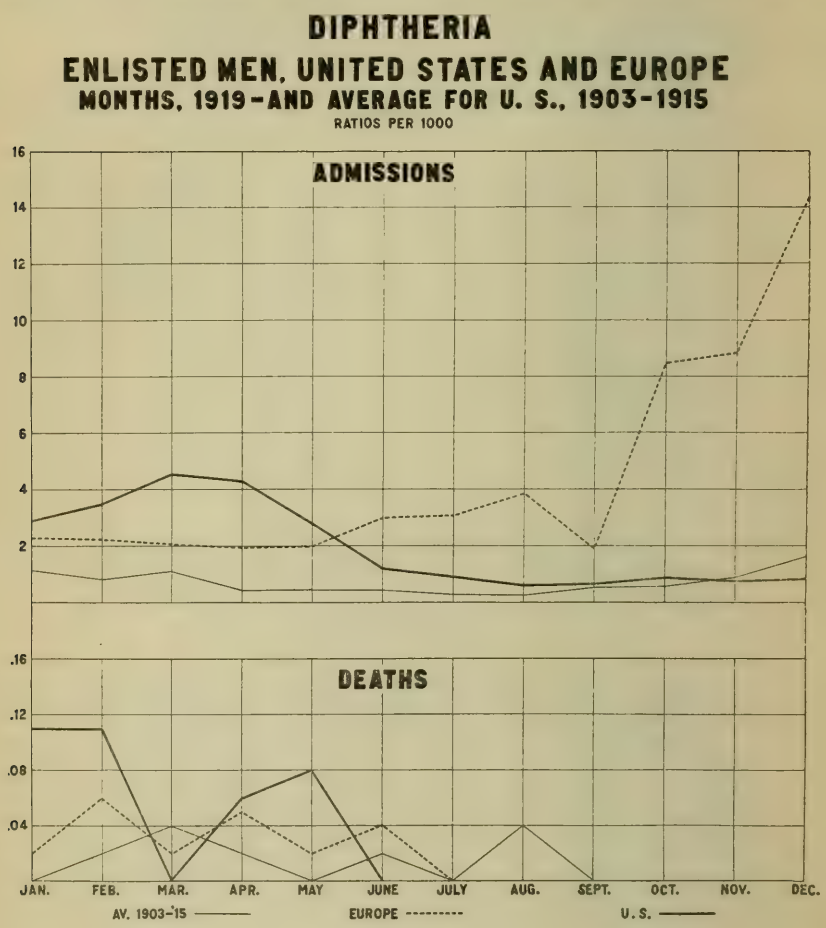


FIG. 38.

though but few camps experienced any difficulty with diphtheria, in places where the disease became firmly rooted it was exceedingly difficult to eradicate in spite of constant attention. The experience of these places have been very similar; just when it seems well under control, fresh outbreaks of six or eight cases have occurred, behaving in every respect like a smoldering fire in which the last spark is difficult to find but is easily fanned to a fresh flame.

TABLE 78.—*Diphtheria—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.					
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	172	3.07	7	1.23	179	2.90	271	2.18	13	1.11	27	311	2.29
February	147	3.74	10	1.82	157	3.50	248	2.27	7	.64	14	269	2.24
March	166	4.90	5	1.34	171	4.55	187	2.01	2	.19	24	213	2.06
April	130	4.59	2	.80	132	4.29	142	2.00	3	.30	13	158	1.95
May	73	3.00	.....	.....	73	2.80	101	2.13	.....	.....	11	112	1.98
June	27	1.31	.....	.....	27	1.22	77	3.40	1	.19	6	84	3.00
July	16	.89	2	1.20	18	.92	29	3.12	1	.96	2	32	3.09
August	9	.69	.....	.....	9	.62	16	4.00	.....	.....	.....	16	3.86
September	9	.72	.....	.....	9	.67	4	1.58	.....	.....	1	5	1.90
October	10	.86	1	1.32	11	.89	15	8.55	.....	.....	.....	15	8.47
November	8	.73	1	1.36	9	.76	14	8.88	.....	.....	.....	14	8.84
December	10	.89	.....	.....	10	.83	22	14.36	.....	.....	.....	22	14.36
Not stated	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	13	.....
Total	777	2.78	28	1.04	805	2.62	1,139	2.33	27	.46	98	1,264	2.31

DEATHS.

From cases remaining 1918	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....
1919.													
January	7	0.12	.....	.....	7	0.11	2	0.02	.....	.....	1	3	0.02
February	5	.13	.....	.....	5	.11	5	.05	.....	.....	2	7	.06
March	.....	.....	.....	.....	.....	.....	2	.02	.....	.....	.....	2	.02
April	2	.07	.....	.....	2	.06	3	.04	.....	.....	1	4	.05
May	2	.08	.....	.....	2	.08	1	.02	.....	.....	.....	1	.02
June	.....	.....	.....	.....	.....	.....	1	.04	.....	.....	.....	1	.04
Not stated	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	2	.....
Total 1919	16	.06	.....	.....	16	.05	16	.03	.....	.....	4	20	.04
Total deaths, remaining cases 1918, and cases 1919	16	.06	.....	.....	16	.05	18	.04	.....	.....	4	22	.04

[1] There were no deaths for the months that are omitted.

SCARLET FEVER.

The admission rate for scarlet fever had shown a decided rise in the United States during the latter part of 1918. This rise continued during the month of January, 1919, the rate for that month being more than twice as high as that for the preceding month, or 6.49 as compared with 3.19. During the month of February there was a slight decline in the rate, which was followed by a further decline in March. In April and May the decrease was very rapid. During the summer and fall months it fell to points much below that for the preceding months, but never reached the average low monthly rate for the years 1903 to 1915.

In Europe the admission rate had shown a slight tendency to increase in December, 1918. This increase was not continued during the early months of 1919. During the late winter and the early spring months the rates were about equal to the prewar monthly

rates, but during the midsummer and autumn months, except for November, the number of cases, as was true for other infectious diseases, showed a decided tendency to increase. It must, however, be recalled that since the strength of the American forces in Europe was small a few cases, sporadic in character, gave a high rate.

Only two cases occurred among the colored troops in the United States, while there was 1,113 among the white, the rate being 3.98

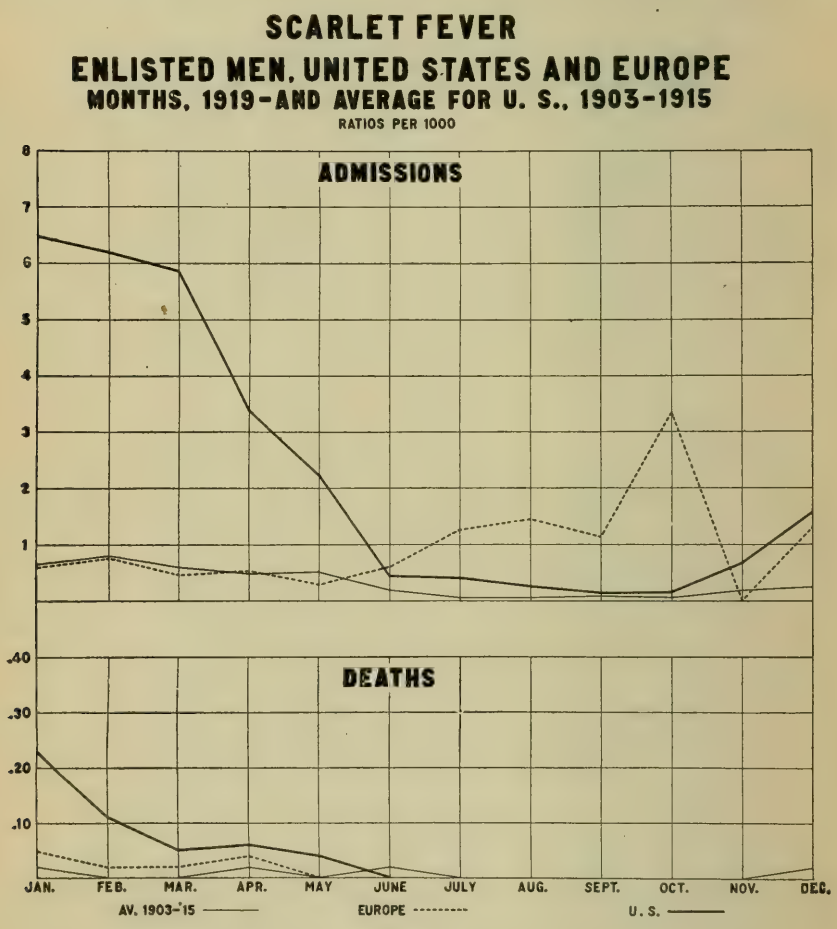


FIG. 39.

for the white and 0.07 for the colored. There were 300 cases among the white troops in Europe and 1 among the colored; 25 deaths occurred in the United States among the white troops, none among the colored; 13 in Europe among the white and none among the colored.

As the Army decreased in size, it became possible to isolate new cases more quickly and place them under control before many new contacts were established. As a result admission and death rates are lowered when the Army is small.

TABLE 79.—*Scarlet fever—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	401	7.15	.....	.....	401	6.49	71	0.57	1	0.09	9	81	0.60
February	278	7.07	.....	.....	278	6.20	83	.76	.....	.....	8	91	.76
March	220	6.49	1	0.27	221	5.87	45	.48	.....	.....	2	47	.46
April	104	3.67	.....	.....	104	3.38	41	.58	.....	.....	3	44	.54
May	58	2.39	.....	.....	58	2.23	17	3.36	.....	.....	.....	17	.30
June	9	.44	1	.65	10	.45	17	.75	.....	.....	.....	17	.61
July	8	.45	.....	.....	8	.41	10	1.07	.....	.....	3	13	1.26
August	4	.31	.....	.....	4	.27	6	1.50	.....	.....	.....	6	1.45
September	2	.16	.....	.....	2	.15	2	.79	.....	.....	1	3	1.14
October	2	.17	.....	.....	2	.16	6	3.42	.....	.....	.....	6	3.39
November	8	.73	.....	.....	8	.68	.....	.....	.....	.....	.....	.....	.....
December	19	1.68	.....	.....	19	1.58	2	1.31	.....	.....	.....	2	1.31
Total	1,113	3.98	2	.07	1,115	3.63	300	.61	1	.02	26	327	.60

DEATHS.

From cases remaining 1918	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
1919.													
January	14	0.25	.....	.....	14	0.23	6	0.05	.....	.....	1	7	0.05
February	5	.13	.....	.....	5	.11	2	.02	.....	.....	.....	2	.02
March	2	.06	.....	.....	2	.05	2	.02	.....	.....	.....	2	.02
April	2	.07	.....	.....	2	.06	3	.04	.....	.....	.....	3	.04
May	1	.04	.....	.....	1	.04	.....	.....	.....	.....	.....	.....	.....
Total 1919	24	.09	.....	.....	24	.08	13	.03	.....	.....	1	14	.03
Total deaths, remaining cases 1918, and cases 1919	25	.09	.....	.....	25	.08	13	.03	.....	.....	1	14	.03

[1] There were no deaths for the months that are omitted.

TYPHOID FEVER.

It is a source of extreme satisfaction that the typhoid admission rate for troops serving in the United States during the period of the war was always low. Average monthly rates have been prepared for the years 1911 to 1915, the period after the introduction of the typhoid vaccination but prior to our participation in the World War. To demonstrate the efficiency of the typhoid-paratyphoid prophylaxis, in conjunction with general sanitary procedures, it is sufficient to state, as will be borne out by an examination of the accompanying charts and tables, that the monthly rates for troops in the United States throughout 1918 and 1919 closely paralleled the prewar monthly rates for the years 1911 to 1915. The same is true of the death rates.

It was shown in the annual report of the Surgeon General for 1919, on pages 1013 and 1014, that had the same rates prevailed for the United States Army in 1917 and 1918 that did prevail in the Civil War during the years 1861 and 1862, there would have been among the United States troops (officers and men) 226,001 cases instead of

the 1,083 cases that did occur, and 62,694 deaths instead of 158 that actually took place; and that had the same rates prevailed as during the Spanish-American War and the Philippine insurrection during the years 1898 and 1899, there would have been 291,637 cases and 30,916 deaths. It was also pointed out that the majority of the

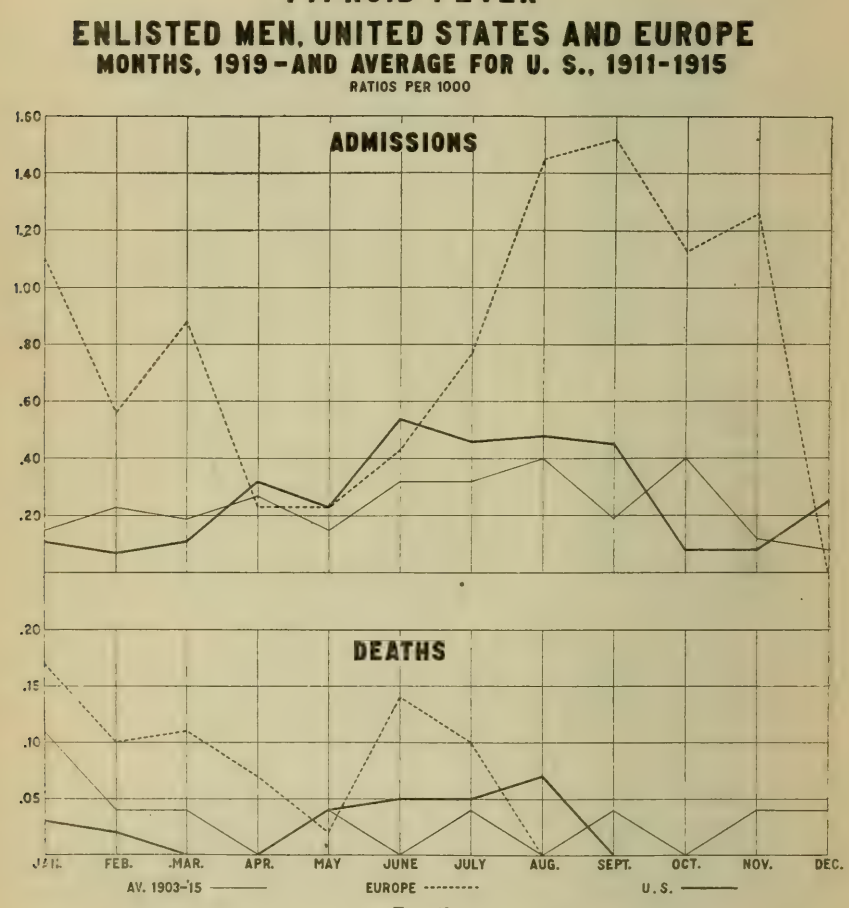


FIG. 40.

cases during 1917 and 1918 occurred among the troops serving on the battle fields of Europe.

Considering the typhoid situation for the troops in Europe from the time of their arrival in France to June, 1918 (first period), it may be said that cases occurred only rarely, the monthly admission rates ranging from .00 to 0.26 per 1,000, that for the majority of the months being below 0.05. During the second period, from June 1, 1918, to June 30, 1919, which included our most active participation in the World War, a few small local epidemics occurred, as indicated below:

In July, 1918, a replacement unit consisting of 248 men coming from Camp Cody, N. Mex., arrived in England with typhoid fever prevailing extensively. It was evident from an investigation that was held that the men were exposed to infection while en route to the port of embarkation, due to the use of contaminated drinking water.

During the Chateau-Thierry offensive, occurring in the second battle of the Marne, diarrheal disease became very prevalent among our troops. It was demonstrated bacteriologically that the prevailing diseases were simple diarrheas, bacillary dysentery, typhoid fever, and paratyphoid fever A and B. The sick and wounded for this area were evacuated to base hospitals in the various parts of France. Very soon thereafter the chief surgeon began to receive occasional reports of typhoid fever and paratyphoid fever and bacillary dysentery. In practically all instances the patients had been evacuated from the area of the second battle of the Marne.

In August, 1918, a small but severe epidemic occurred in a detachment of Engineer troops stationed at Bazoilles. There was an epidemic of typhoid fever in the civil population, and the epidemic was very definitely traced to a cook in the mess of this Engineer detachment. This soldier remained on duty as cook for five days after the onset of symptoms of typhoid fever.

Both typhoid and paratyphoid fevers, as well as dysentery, prevailed to some extent among our troops after the St. Mihiel offensive.

A small epidemic occurred in the Joinville concentration area in December, 1918, and January, 1919. In a group of Medical Department units concentrated there a number of cases occurred. It was apparent that this epidemic was due to the use of grossly contaminated drinking water.

Following the offensive in the Meuse-Argonne section typhoid and paratyphoid fevers were reported from practically all divisions engaged. It is quite evident that the initial cases were caused largely by drinking infected water. Due, however, to the active military operations, the initial cases were frequently not properly diagnosed, and as a result secondary cases from contact occurred. In some divisions there were only a few cases, in others infections were much more numerous.

A small epidemic due to the same cause also occurred in March, 1919, in the personnel of the Motor Reception Park at Marseille.

After the armistice, the incidence of typhoid-paratyphoid fever was confined largely to two divisions, the Seventy-seventh and the Seventy-ninth. These divisions were operating in the devastated area formerly occupied by the German troops where typhoid was known to have been endemic and to have given the German Army a considerable amount of trouble.

A brief survey of the outstanding features of the typhoid situation in Europe might suggest to the casual reader that typhoid fever was a medical and sanitary problem of considerable seriousness there. Such, however, was not the case, as is evidenced by the general admission rates throughout the period, which were inconsiderable as compared with the total admission rates. Those who had first-hand knowledge of the sanitary conditions in the combat and billeting areas occupied by our troops in France, of the general pollution of water supplies and of the frequently continuous exposure to infectious material, can fully realize the importance of the rôle played by prophylactic vaccination, chlorination of water, and other preventive measures employed in the control of this disease.

TABLE 80.—*Typhoid fever—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	5	0.09	2	0.35	7	0.11	136	1.10	9	0.77	4	149	1.10
February	3	.08	.....	.....	3	.07	60	.55	3	.27	4	67	.56
March	4	.12	.....	.....	4	.11	81	.87	3	.29	7	91	.88
April	10	.35	.....	.....	10	.32	17	.24	.....	.....	2	19	.23
May	6	.25	.....	.....	6	.23	11	.23	.....	.....	2	13	.23
June	12	.58	.....	.....	12	.54	11	.49	1	.19	.....	12	.43
July	9	.50	.....	.....	9	.46	8	.86	.....	.....	.....	8	.77
August	7	.54	.....	.....	7	.48	4	1.00	.....	.....	2	6	1.45
September	6	.48	.....	.....	6	.45	4	1.58	.....	.....	.....	4	1.52
October	1	.09	.....	.....	1	.08	2	1.14	.....	.....	.....	2	1.13
November	1	.09	.....	.....	1	.08	2	1.27	.....	.....	.....	2	1.26
December	3	.27	.....	.....	3	.25	.....	.....	.....	.....	.....	.....	.....
Total	67	.24	2	.07	69	.22	336	6.88	16	.27	21	373	.68

DEATHS.

From cases remaining 1918	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	1	.....
1919.													
January	.....	.....	2	0.35	2	0.03	19	0.15	4	0.34	.....	23	0.17
February	1	0.03	.....	.....	1	.02	11	.10	.....	.....	1	12	.10
March	.....	.....	.....	.....	.....	.....	9	.10	1	.10	1	11	.11
April	.....	.....	.....	.....	.....	.....	4	.06	.....	.....	2	6	.07
May	1	.04	.....	.....	1	.04	.....	.....	.....	.....	1	1	.02
June	1	.05	.....	.....	1	.05	4	.18	.....	.....	.....	4	.14
July	1	.06	.....	.....	1	.05	1	.11	.....	.....	.....	1	.10
August	1	.08	.....	.....	1	.07	.....	.....	.....	.....	.....	.....	.....
Total, 1919	5	.02	2	.07	7	.02	48	.10	5	.09	5	58	.11
Total deaths, remaining cases 1918, and cases 1919	5	.02	3	.11	8	.03	48	.10	5	.09	6	59	.11

[1] There were no deaths for the months that are omitted.

MALARIA.

Prior to the World War malarial fevers in the Army were gradually diminishing as a result of modern methods of control. During the war even the peace-time rates were lowered to a very striking extent. It was demonstrated during 1917 and 1918 that it was possible to eliminate almost entirely malarial fevers from among our troops. This was the direct result of a large expenditure of money for drainage work and other mosquito-control measures carried on within the many large camps and cantonments under the supervision of the Division of Sanitation, and in extra-cantonment areas by the United States Public Health Service in cooperation with the Army and local health authorities.

During the latter part of the year 1919 most of the extra-cantonment work was abandoned and the funds available for continuing the work within the Army stations were so reduced as to necessitate a considerable decrease in the malaria-control activities. As a

result, during the latter part of the year, beginning with July, there was a decided increase in the rates which after July rose above the corresponding ones for the year 1918. The correct statistics show that the rise continued during the summer of 1920, when antimosquito work in camps was further curtailed because of lack of funds. If unchecked the rates for one year mean increased ones for the following

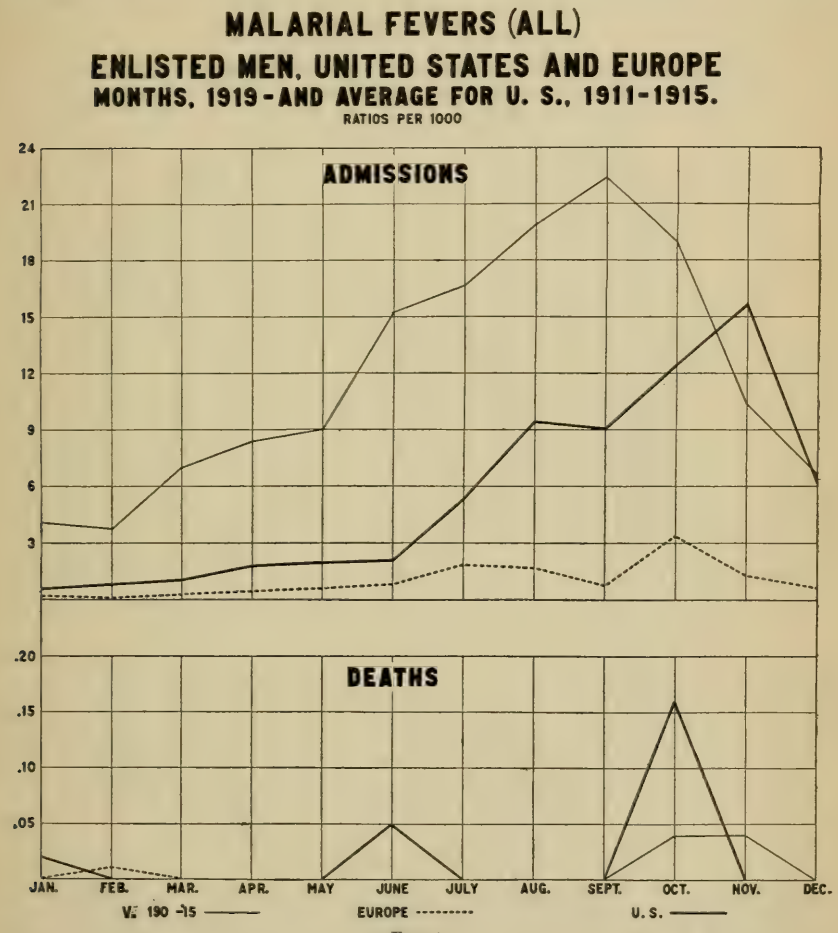


FIG. 41.

year, as each new case becomes a focus of infection for additional cases.

It is gratifying to note, however, that for the entire year 1919, other than for November in the United States, the admission rate, both in the United States and in Europe, was lower than the prewar rates. The total admission rate in the United States for the year was 3.38, as compared to 3.97 for 1918, and in Europe it was 0.35, as compared with 0.59. Also, for each month, with the exception of November, the rates were much lower than the average for the corresponding month for the prewar period 1911 to 1915. As in

1918, the admission rate for the colored troops was much lower than for the white troops in the United States. There were only four deaths charged against malaria in the United States during the entire year, and one in Europe.

The following remarks from the report of the camp surgeon at Camp Jackson are of interest:

There were 46 cases of malaria reported. Very few originated in this camp. The cases were among men recruited from this and adjoining States where malaria is prevalent.

TABLE 81.—*Malarial fevers—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*[1]

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	31	0.55	4	0.70	35	0.57	17	0.14	4	0.34	3	24	0.18
February	33	.84	3	.54	36	.80	8	.07	.....	.....	1	9	.07
March	36	1.06	3	.81	39	1.04	20	.22	5	.49	1	26	.25
April	53	1.87	2	.80	55	1.79	28	.39	7	.70	1	36	.44
May	44	1.81	7	4.04	51	1.96	28	.59	3	.33	3	34	.60
June	44	2.14	2	1.29	46	2.08	20	.88	2	.37	1	23	.82
July	102	5.69	2	1.20	104	5.31	14	1.50	4	3.84	1	19	1.84
August	134	10.26	3	2.00	137	9.41	7	1.75	.....	.....	.....	7	1.69
September	117	9.40	4	4.24	121	9.04	2	.79	.....	.....	.....	2	.76
October	153	13.13	1	1.32	154	12.41	6	3.42	.....	.....	.....	6	3.39
November	182	16.49	2	2.73	184	15.64	2	1.27	.....	.....	.....	2	1.26
December	74	6.56	.....	.....	74	6.15	1	.65	.....	.....	.....	1	.65
Not stated	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Total	1,003	3.58	33	1.22	1,036	3.38	153	.31	25	.43	12	190	.35

DEATHS.

January	1	0.02	.....	.....	1	0.02	.....	.....	.....	.....	.....	.....	.....
February	.....	.....	.....	.....	.....	.....	1	0.01	.....	.....	.....	1	0.01
June	1	.05	.....	.....	1	.05	.....	.....	.....	.....	.....	.....	.....
October	1	.09	1	1.32	2	.16	.....	.....	.....	.....	.....	.....	.....
Total	3	.01	1	.04	4	.01	1	.00	.....	.....	.....	1	.00

[1] There were no deaths for the months that are omitted.

TUBERCULOSIS.

Tuberculosis is a disease which preeminently shows the influence of the military policy upon its rates, particularly upon its death rates and noneffective rates. During the year 1919 (as also in 1918) it was the established policy to retain in the military hospitals cases of this and other chronic diseases until the patients had attained a maximum degree of improvement. Prior to the World War it was the custom to discharge from the service cases of tuberculosis and other chronic diseases after a comparatively short period of treatment, when it had been clearly demonstrated that the patients would no longer be of value to the military service. As a result, the death and noneffective rates for this class of diseases were comparatively low. During 1919 many patients died while in the military service who would in prewar times have been discharged from the Army

and would have died as civilians. In considering the deaths resulting from tuberculosis it should be remembered that as far as practicable any death that ultimately occurred from a disease which became apparent while the man was serving in Europe was charged to that country, even though the death took place in the United States.

Due to the fact that few men were being brought into the service during the early part of 1919, the admission rate in the United States

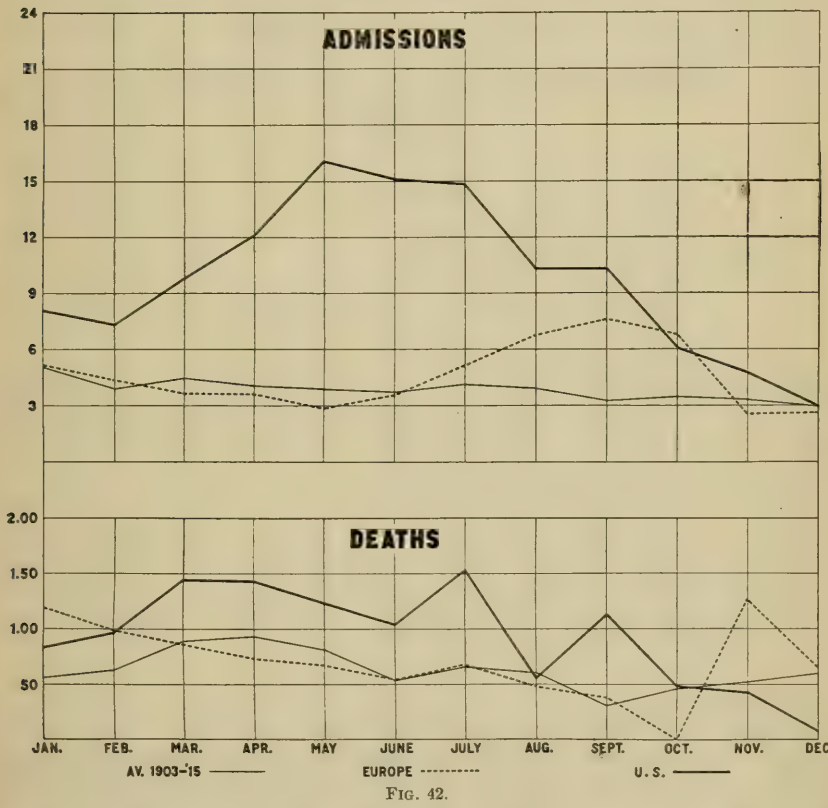


FIG. 42.

for this period was comparatively low and much lower than it had been during the early months in 1918. The monthly rates were lower each month of the year than they had been in 1918, with the exception of the months of May, June, and September. During these months, because many cases were detected when the men were examined for demobilization, the rates showed a decided increase, being higher than the corresponding ones for 1918, and much above the prewar rates. It was not until the latter part of the year that the rates approached the prewar standard. In Europe the monthly

admission rates throughout the year, except during the late summer and early autumn, closely paralleled the prewar rates in the United States.

As had been true in previous years, the rates for the colored troops, both for admissions and for deaths, in Europe as well as in the United States, were much higher than the corresponding rates for the white troops. The admission rate in the United States for the colored was 14.17 and for the white 9.65; in Europe 8.64 for the colored and 3.51 for the white. Six hundred and seventy-four deaths occurred as a result of this disease from cases that became apparent while serving in the United States, and 781 while serving in Europe, the rates being 2.20 for the United States and 1.43 for Europe. Throughout the year the monthly death rates, both in the United States and in Europe, were much higher than the monthly prewar rates in the United States.

TABLE 82.—*Tuberculosis*[1]*—Admissions and deaths, enlisted men, United States and Europe, months, 1919.*

ADMISSIONS.

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	431	7.69	68	11.94	499	8.08	549	4.43	106	9.06	48	703	5.18
February	266	6.77	62	11.25	328	7.32	389	3.56	98	8.96	36	523	4.35
March	326	9.62	43	11.56	369	9.81	276	2.97	78	7.60	21	375	3.63
April	341	12.04	32	12.88	373	12.11	186	2.62	94	9.42	12	292	3.60
May	386	15.87	32	18.48	418	16.05	99	2.08	59	6.52	3	161	2.85
June	298	14.48	36	23.27	334	15.10	61	2.69	35	6.55	3	99	3.54
July	233	13.00	58	34.69	291	14.85	39	4.19	12	11.52	2	53	5.12
August	135	10.33	15	9.99	150	10.30	19	4.75	5	34.48	4	28	6.75
September	128	10.28	10	10.59	138	10.31	19	7.52	1	9.35	.....	20	7.59
October	61	5.23	14	18.49	75	6.04	12	6.84	.....	.....	.....	12	6.78
November	48	4.35	8	10.91	56	4.76	2	1.27	1	142.86	1	4	2.53
December	33	2.92	3	4.03	36	2.99	4	2.61	.....	.....	.....	4	2.61
Not stated	14	.....	2	.....	16	.....	58	.....	17	.....	2	77	.....
Total	2,700	9.65	383	14.17	3,083	10.04	1,713	3.51	506	8.64	132	2,351	4.30

DEATHS.

From cases remaining 1918	180	.....	117	.....	297	.....	61	.....	38	.....	6	105	.....
1919.													
January	34	0.61	17	2.99	51	0.83	86	0.69	51	4.36	24	161	1.19
February	26	.66	17	3.09	43	.96	61	.56	50	4.57	8	119	.99
March	36	1.06	18	4.84	54	1.44	51	.55	28	2.73	10	89	.86
April	27	.95	17	6.84	44	1.43	27	.38	29	2.90	3	59	.73
May	21	.86	11	6.35	32	1.23	14	.29	22	2.43	2	38	.67
June	12	.58	11	7.11	23	1.04	4	.18	11	2.06	.....	15	.54
July	17	.95	13	7.78	30	1.53	3	.32	4	3.84	.....	7	.68
August	3	.23	5	3.33	8	.55	1	.25	1	6.90	.....	2	.48
September	9	.72	6	6.36	15	1.12	1	.40	.....	.....	.....	1	.38
October	4	.34	2	2.64	6	.48	.....	.....	.....	.....	.....	.....	.....
November	1	.09	4	5.46	5	.42	.....	.....	1	142.86	1	2	1.26
December	1	.09	.....	.....	1	.08	.....	.....	1	.....	.....	1	.65
Not stated	28	.....	37	.....	65	.....	98	.....	84	.....	.....	182	.....
Total 1919	219	.78	158	5.84	377	1.23	346	.71	282	4.81	48	676	1.24
Total deaths, remaining cases 1918, and cases 1919	399	1.43	275	10.17	674	2.20	407	.83	320	5.46	54	781	1.43

[1] Does not include suspected tuberculosis.

Venereal Diseases.

As the result of the Army experience gained in 1917 and 1918, it is evident that the admission rates for venereal diseases in the Army are largely increased during mobilization periods by the induction into the military service of a large number of men with infections contracted in civil life. An examination of the table showing the monthly admission rates for venereal diseases in the United States for 1918 in the report of the Surgeon General for 1919, on page 962, shows that the highest admission rates occurred during the months when the largest number of men were being inducted into the service, and that during the latter part of the year, especially in November

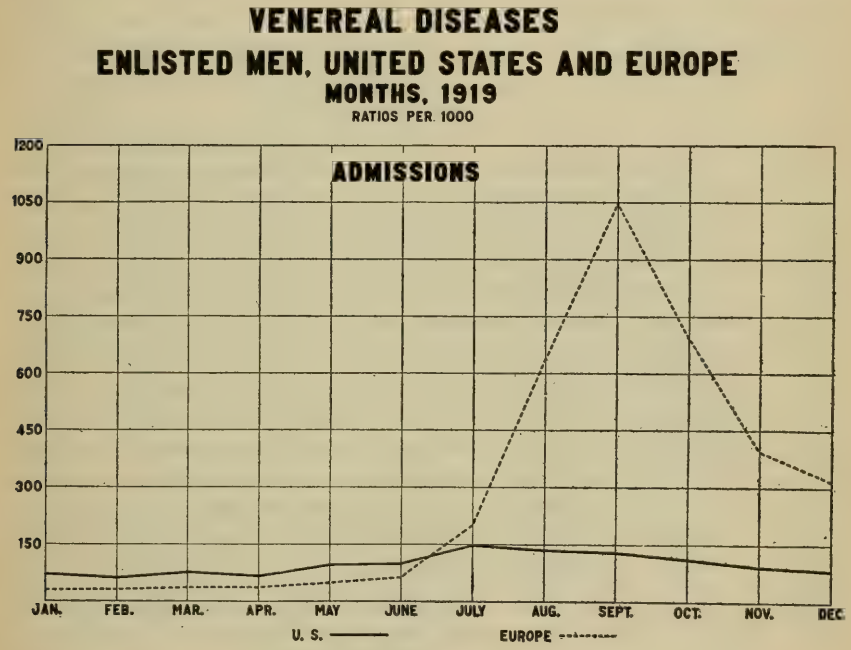


Fig. 43.

and December, after the signing of the armistice, the rates registered a very material reduction.

This reduction continued during the first part of 1919. There was a temporary rise in March, with a fall in April. In May a rise began, which continued during the next few months, extending through the month of July The examination of the mobilization and enlistment table (Table, p. 150) will show that the enlistments and demobilizations were both very active during April, May, June, and July. As was to be expected, there was a lag of a few weeks in the rise in admission rate for venereal diseases following the active enlistment period, and consequently the rates continued high for some time. After July there was a decrease which was very marked after September in these monthly rates. This decrease was due to a large extent to a fall in the admission rates for the Negro troops. From an examination of the strength and enlistment tables it is

apparent that few colored soldiers were being enlisted during these last three months. There was also some decrease in the white rates, though this decrease was not nearly so marked as that for the colored troops. No doubt some of the decreases in the rates for the latter months were due to the renewal with increased activity of the antivenereal campaign by this office.

In this connection the following remarks from the camp surgeons are of interest:

Camp Pike.—It is impossible to state at the present from what sources the venereal diseases were derived owing to the fact that clinical records have been forwarded from this camp. It is believed that by far the larger percentage arose among casusal returning home for demobilization.

Camp Lee.—The rates for these diseases have been disappointingly high. The admission rate in January was low, 17, and in September was high, with 137. Included in these figures are new cases contracted overseas or elsewhere among men sent here for discharge, particularly among colored troops, of whom nearly 31,000 passed through the demobilization mill.

Camp Devens.—The venereal rate existing during the nine months of this year, when this camp was functioning as a demobilization center, can be ascribed in great part to disease existing in casuals who became infected prior to arrival at this camp. The greater number of hospital cases early in the year presumably resulted from transfer of overseas convalescents and from the large number of casuals arriving here for demobilization or transfer to other stations and having been traveling during the incubation stage, arrived here about the time for initial symptoms to appear.

Camp Travis.—Much of the work of the Medical Department concerned the care of the venereally infected men, whose condition was chronic before the draft brought them into the service. In these men, especially among the Negro contingent, much hospital treatment, with a negligible amount of service rendered by the soldier, characterized the case. This suggests the desirability of either excluding chronic venereal cases from the Army in future mobilization of men of draft age, or otherwise of requiring their treatment on a duty status.

In considering the rates in Europe for the year, two points should be held in mind: First, under the system which was in vogue until the last three months of the year, hospital cases only were reported, whereas during the last three months all cases were reported; second, as the war Army on duty in France was returned to this country, the ranks of the Army of Occupation in Germany were filled by raw and immature recruits sent from the United States. Medical officers in Germany claim that a great number of cases in November were brought there from the United States with the Second Brigade. It is stated that "The rapid rise in the number of venereal cases admitted to the base hospital during the week of November 7 to 14 was largely due to the arrival of the Second Brigade. Although this brigade actually joined those forces on November 14, it began to unload its venereal cases on the base hospital as soon as it reached the base port en route to this station." There is no doubt, however, that a very excessive number of cases were contracted in Germany during the latter part of the year.

The following remarks from the report of the chief surgeon, American forces in Germany, are of great interest:

Venereal diseases.—Before the return of the Third Army to the United States, it was realized as the number of our troops decreased and the American forces in Germany were organized that the greatest problem for the Medical Department would be the combating of venereal diseases. It was a foregone conclusion that the low venereal rate maintained by the Third Army could not be expected among the American forces in Germany for the following reasons:

The Third Army was composed of a class of men, for the most part, with good mental and moral standards. They were in the service for the period of the war and after the armistice were anxious to return home and back to civil life. They realized that

if they contracted a venereal disease they would be held in Europe under treatment, and would not be present when their divisions were welcomed home. They therefore practiced continence to a great extent. The American forces in Germany were composed of men wishing to remain in Germany, many reenlisting for that purpose, and of young recruits sent from the States. They had fewer home ties and were mostly remaining or enlisting in the Army for the experience to be had for a good time. Many, no doubt, were attracted by the opportunities for drinking and dissipation overseas, which they would not have done at home. This is indicated by the

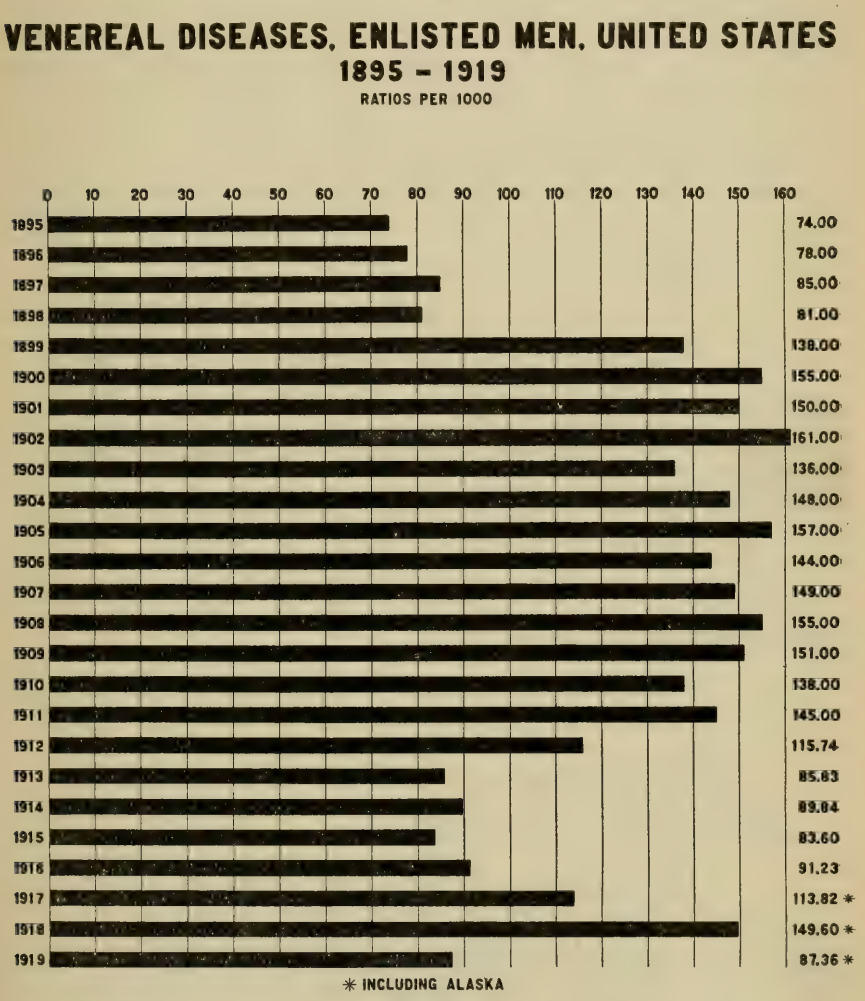


FIG. 44.

large number of undesirables later returned to the United States, mostly on account of alcoholism and general worthlessness.

It can be assumed that the efforts made to keep down the number of public women, and to detect and treat these women when found infected, met with about the same degree of success during the Third Army period as during the time of the American forces in Germany. In spite of the vice squads, vagrancy courts, and regulations with reference to the practice of prostitution, a certain number of public women will always be present to prey upon the American soldiers.

Alcoholism is generally associated with increased venereal rate. While soldiers are only permitted to drink light wines and beer, the illicit traffic in brandy can not

be prevented in a country which does not forbid the sale of any form of alcohol to its own people. The use of alcohol and drunkenness has unquestionably increased the amount of venereal diseases, leading to increased exposure and less precautions in preventing infection after exposure.

Following the admission of many venereal cases after the arrival of the Silesian expeditionary forces, November 4, 1919, there was a reduction in the venereal rate. These troops were billeted in small towns where prostitution was easier to control and fewer exposures occurred. Consequently, their rate was surprisingly low. Later, as prostitutes became more numerous in their area and after the conduct classification-card system went into effect, their rate became as high as that for the other troops.

The onset of winter and bad weather was no doubt a contributing factor in reducing the incidence during December, January, and February. During the spring, summer, and autumn months not only do opportunities for exposure increase, but exposures occur under conditions which do not permit of proper prophylaxis.

Owing to the difference in the exchange value of the American dollar and the German mark, our soldiers in the Rhineland, where prices have remained comparatively low, have had too much money to spend for amusement. The private soldier has received more pay in marks than some of the highest salaried German Government officials. This has attracted prostitutes and has increased the amount of drinking and exposures to venereal diseases.

During the month of February, 1920, the conduct classification-card system went into effect. While no doubt an excellent plan of rewarding men for good behavior and thereby improving the morale of the troops, it has unfortunately been a factor in increasing the venereal rate. According to this system, men holding first-class cards are excused from check roll calls and are permitted to be absent from their organizations when not on duty. Over 60 per cent of all the troops hold first-class cards and can therefore remain out all night. The effect of this is to enable the soldier, while off duty, to go a long way in seeking women and amusement. Soldiers on duty in the small villages can visit nightly the dance halls and drinking places frequented by prostitutes in the cities and larger towns. In remaining out all night prophylaxis is not taken until morning, hours after the first exposure.

The effect of this on the venereal rate is seen more in organizations, such as those belonging to the Second Brigade, which are billeted in the smaller towns and which had previously had comparatively little venereal disease.

As in previous years, the admission rate for the colored troops in the United States was much higher than for the whites. In Europe the difference was not so marked.

TABLE 83.—*Gonococcus infections—Admissions, by months, 1919, enlisted men, United States and Europe.*

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	1,692	30.17	1,150	201.97	2,842	46.01	1,685	13.58	148	12.65	276	2,109	15.53
February	976	24.82	590	107.10	1,566	34.93	1,454	13.32	130	11.89	230	1,814	15.10
March	1,024	30.20	710	190.86	1,734	46.09	1,426	15.34	168	16.37	285	1,879	18.20
April	852	30.08	356	143.26	1,208	39.21	1,146	16.12	150	15.03	171	1,467	18.09
May	1,137	46.76	388	224.02	1,525	58.54	999	21.04	122	13.47	230	1,351	23.90
June	1,022	49.67	252	162.90	1,274	57.59	1,269	56.06	194	36.28	286	1,749	62.50
July	1,204	67.17	326	194.98	1,530	78.07	592	63.64	47	45.10	240	879	84.96
August	898	68.73	327	217.85	1,225	84.09	917	229.20	54	372.41	407	1,378	332.37
September	879	70.62	192	203.39	1,071	79.99	1,185	169.12	67	626.17	266	1,518	576.31
October	843	72.32	53	70.01	896	72.18	628	357.83	7	466.66	53	688	388.70
November	663	60.09	25	34.11	688	58.48	355	225.11	.....	.....	2	357	225.38
December	635	56.27	17	22.82	652	54.20	266	173.63	1	.....	14	281	183.41
Not stated	35	.....	.....	.....	35	.....	84	.....	14	.....	19	117	.....
Total	11,860	42.37	4,386	162.23	16,246	52.93	12,006	24.60	1,102	18.81	2,479	15,587	28.51

TABLE 84.—*Syphilis admissions, by months, 1919, enlisted men, United States and Europe.*

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	722	12.88	383	67.26	1,105	17.89	672	5.42	115	9.83	135	922	6.79
February	445	11.32	373	67.71	818	18.25	567	5.19	120	10.97	104	791	6.59
March	456	13.45	281	75.54	737	19.59	605	6.51	148	14.42	150	903	8.75
April	406	14.34	129	51.91	535	17.37	431	6.06	161	16.13	61	653	8.05
May	451	18.55	149	86.03	600	23.03	416	8.76	174	19.22	71	661	11.69
June	411	19.98	134	86.62	545	24.63	328	14.49	150	28.05	104	582	20.80
July	523	29.18	242	144.74	765	39.04	157	16.88	69	66.21	124	350	33.83
August	309	23.65	92	61.30	401	27.53	248	61.99	37	255.17	68	353	85.14
September	298	23.94	61	64.62	359	26.81	267	105.70	64	598.13	24	355	134.77
October	233	19.99	35	46.24	268	21.59	106	60.40	1	66.67	12	119	67.23
November	212	19.21	13	17.74	225	19.12	34	21.56	1	142.86	.....	35	22.09
December	169	14.97	11	14.76	180	14.96	30	19.58	.....	.....	4	34	22.19
Not stated	19	.....	.....	.....	19	.....	26	.....	13	.....	6	45	.....
Total	4,654	16.63	1,903	70.39	6,557	21.36	3,887	7.96	1,053	17.97	863	5,803	10.61

TABLE 85.—*Chancroid—Admissions, by months, 1919, enlisted men, United States and Europe.*

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	164	2.92	251	44.09	415	6.72	682	5.50	120	10.26	94	896	6.60
February	159	4.04	196	35.58	355	7.92	635	5.82	145	13.26	114	894	7.44
March	170	5.01	225	60.49	395	10.50	640	6.88	171	16.66	123	934	9.05
April	176	6.22	118	47.49	294	9.54	567	7.97	177	17.73	128	872	10.75
May	243	9.99	116	66.97	359	13.77	400	8.42	184	20.32	136	720	12.73
June	253	12.30	107	69.17	360	16.27	395	17.45	191	35.72	233	819	29.27
July	365	20.36	252	150.72	617	31.48	355	38.16	187	179.46	296	838	81.00
August	229	17.53	125	83.28	354	24.30	586	146.46	113	779.31	200	899	216.84
September	198	15.91	102	108.05	300	22.40	720	285.03	98	915.89	67	885	335.99
October	190	16.30	28	36.99	218	17.56	410	233.62	4	266.67	6	420	237.29
November	158	14.32	10	13.64	168	14.28	229	145.21	.....	.....	2	231	145.83
December	147	13.03	22	29.53	169	14.05	161	105.09	3	.....	6	170	110.97
Not stated	7	.....	1	.....	8	.....	4	.....	9	.....	39	52	.....
Total	2,459	8.78	1,553	57.45	4,012	13.07	5,784	11.85	1,402	23.93	1,444	8,630	15.73

TABLE 86.—*Venereal diseases—Admissions, by months, 1919, enlisted men, United States and Europe.*

Months.	United States.						Europe.						
	White.		Colored.		Total.		White.		Colored.		Color not stated, number.	Total.	
	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.		Number.	Ratio.
January	2,578	45.97	1,784	313.31	4,362	70.61	3,039	24.50	383	32.73	505	3,927	28.93
February	1,580	40.19	1,159	210.38	2,739	61.10	2,656	24.33	395	36.12	448	3,499	29.13
March	1,650	48.67	1,216	326.88	2,866	76.18	2,671	28.73	487	47.45	558	3,716	36.00
April	1,434	50.64	603	242.66	2,037	66.13	2,144	30.15	488	48.88	360	2,992	36.89
May	1,831	75.29	653	377.02	2,484	95.36	1,815	38.22	480	53.01	437	2,732	48.32
June	1,686	81.94	493	318.68	2,179	98.50	1,992	88.01	535	100.06	623	3,150	112.57
July	2,092	116.71	820	490.43	2,912	148.59	1,104	118.67	303	290.78	660	2,067	199.81
August	1,436	109.90	544	362.43	1,980	135.92	1,751	437.64	204	1,406.90	675	2,630	634.28
September	1,375	110.47	355	376.06	1,730	129.20	2,172	859.86	229	2,140.19	357	2,758	1,047.07
October	1,266	108.61	116	153.23	1,382	111.34	1,144	651.85	12	800.00	71	1,227	693.22
November	1,033	93.62	48	65.48	1,081	91.88	618	391.88	1	142.86	4	623	393.30
December	951	84.27	50	67.11	1,001	83.20	457	298.30	4	.....	24	485	316.58
Not stated	61	.....	1	.....	62	.....	114	.....	36	.....	64	214	.....
Total	18,973	67.78	7,842	290.05	26,815	87.37	21,677	44.41	3,557	60.71	4,786	30,020	54.91

SPECIAL DIVISIONS, SURGEON GENERAL'S OFFICE.

ADMINISTRATION DIVISION.

This division is a product of the war, and its development was due to the necessity of a coordinating and supervising agency within the bureau, which had suddenly expanded into an organization many times larger than it had ever been within the memory of any of its personnel. It was officially established by an office order dated September 20, 1917. Its nucleus was the record and correspondence sections of the old Record, Correspondence, and Examining Division. Other activities not pertaining to any other divisions of the office were from time to time added until it now consists of the following sections:

(1) Chief clerk's section, in which all matters pertaining to department clerical personnel, miscellaneous correspondence, and office equipment and supplies are handled. In addition this section, until recently, had charge of all matters pertaining to the appointment, promotion, transfer, etc., of employees of the Medical Department at large.

The number of departmental employees of the Medical Department increased from 160 on April 6, 1917, to 1,567 on December 15, 1918. Since that date the number has gradually decreased and is now (June 30, 1920) 218. The number of the Medical Department at large personnel increased from 260 on April 6, 1917, to 26,497 on March 15, 1919, and is now (June 30, 1920) 1,824.

(2) Pay-roll and hospital fund section, in which the pay rolls of the civilian personnel of the office are prepared and all matters pertaining to the hospital fund are handled.

(3) Mail, record, and files section, having charge of the receipt, distribution, and despatch of mail and of the recording and filing of all documents and correspondence.

(4) Mimeograph and circulation section, having charge of all mimeograph work and the circulation of orders, instructions, etc., both within the Surgeon General's Office and to the Medical Department personnel under the immediate jurisdiction of the office, i. e., general hospitals, Medical Department schools, etc.

(5) Publicity section, having charge of hospital newspapers, etc. This section also cooperates with other sections of the office in giving publicity to their activities and with The Adjutant General's Office in regard to publicity pertaining to recruiting, etc.

SANITARY DIVISION.

Introduction.

During the fiscal year ending June 30, 1920, the Sanitary Division has continued to operate in the same manner as in the preceding 12 months, but on the constantly diminishing scale rendered possible by the decrease in the size and activity of the Military Establishment. The functions of the various sections of the division were fully described in the report of the Surgeon General of the Army for the fiscal year ending June 30, 1919. During the year now being reported upon the section of food and nutrition was discontinued (February 15, 1920), the subsection of vemin infestation and disinfestation ceased to exist (July 31, 1919), the handling of personnel pertaining

to the Sanitary Division was transferred to the Personnel Division of the office, and the field of action of the section of sanitary inspection was greatly restricted as a result of the decentralizing policy of the War Department, as promulgated in General Orders, No. 132, War Department, 1919, which placed upon the department commander the responsibility for the sanitary conditions at many of the stations formerly directly under the control of the War Department.

Personnel assigned to Division of Sanitation at the beginning and end of the fiscal year 1919–20.

Section.	July 1, 1919.			June 30, 1920.		
	Officers.	Enlisted men.	Civil employees.	Officers.	Enlisted men.	Civil employees.
Chief of division	1	.....	1	1	.....	1
Sanitary inspections	3	.....	2	1	.....	.....
Medical records	3	.....	181	1	.....	32
Current statistics	1	1	1	1	1	.....
Physical examinations	2	2	1	1	.....	1
Sanitary engineering	4	2	1	1	.....	1
Food and nutrition	1	.....	1	.....	.....	.....
Miscellaneous	6	.....	9	[1]	.....	.....
Total	21	5	197	6	1	35

[1] The matters formerly handled by the section of physical examinations and by the miscellaneous section are now all handled by a single officer and clerk.

General Sanitary Matters.

Matters of general sanitation have received the same attention as during the preceding two years. Owing to the numerous discharges and frequent changes in station of medical officers, to the replacement of more or less experienced soldiers by raw recruits, to the widespread deterioration in morale on the part of military personnel, and to other factors, it has been increasingly difficult to enforce sanitary regulations. Reports of sanitary inspectors have disclosed many derelictions in those respects and much effort has been expended in attempts to overcome these conditions. Among the matters receiving special attention may be mentioned the following:

Antityphoid and antiparatyphoid inoculation and smallpox vaccination.—Numerous reports from station surgeons, commanding officers, department surgeons, sanitary inspectors, and representatives of the Inspector General's Department during the year have indicated that these essential sanitary precautions were frequently being neglected, or if the vaccines were administered the fact was not recorded on service records as required by existing regulations. In many instances failure to make proper records resulted in revaccination which otherwise would have been unnecessary. The sending of recruits from depots to their permanent stations before the typhoid-paratyphoid prophylaxis had been completed, and the failure of the authorities at the new station to follow up the matter, was a large factor in producing this unsatisfactory condition. The seriousness of the situation was several times presented to The Adjutant General and as a result of these representations the following instructions were issued:

Circular No. 53.

War Department,
Washington, February 2, 1920.

ENTRY ON SERVICE RECORDS OF FACT AND DATE OF SMALLPOX VACCINATION AND TYPHOID-PARATYPHOID IMMUNIZATION.

Numerous cases of the failure to enter on the service records of enlisted men the data in connection with typhoid immunization have been reported. As a result enlisted men have frequently been needlessly subjected to a second immunization, causing

much dissatisfaction. Cases of recruits joining organizations from recruit depots with smallpox vaccination incomplete have also been reported. The attention of all concerned is directed to paragraph 866, Army Regulations, paragraphs 24, 25 and 35, Special Regulations No. 28, the provisions of which will be strictly adhered to. For guidance in the application of paragraph 25, Special Regulations No. 28, it is announced that it is the present policy of the War Department to have recruits join their organizations as soon as practicable after enlistment.

[220.3, A. G. O.]

By order of the Secretary of War:

PEYTON C. MARCH,
General, Chief of Staff.

Official:
P. C. HARRIS,
The Adjutant General.

WAR DEPARTMENT,
THE ADJUTANT GENERAL'S OFFICE,
Washington, April 17, 1920.

From: The Adjutant General of the Army.
To: The recruiting officer at each main recruiting station except Peoria, Ill., and Grand Rapids, Mich., and to all department commanders in the United States.
Subject: Vaccination, etc., of members of recruiting parties.

1. Officers in charge of recruiting districts will take the necessary action to have all members of their commands protected against smallpox, typhoid, and paratyphoid, and to see that service records are properly completed. The details are left to their judgment and they will issue the necessary travel orders, mileage, and interruption to recruiting to be considered. It may be desirable to have the medical officer make visits to each station, or it may be found more desirable to assemble the men of the district at two or more places. The travel directed is necessary in the military service.

2. The medical officers will be available for this work in the 15 recruiting districts having such medical officers on duty therein, and requisition will be made for the necessary vaccine. The recruiting officers in the other districts concerned will call upon the proper department commander for the detail of a medical officer to perform this duty and the recruiting officer will correspond with the medical officer ordered to his district pursuant to such requests regarding arrangements, vaccine, etc.

* * * * * * *

By order of the Secretary of War:

W. V. CARTER, *Adjutant General.*

720.3 (Pub. Div.).

WAR DEPARTMENT,
THE ADJUTANT GENERAL'S OFFICE,
Washington, May 12, 1920.

From: The Adjutant General of the Army.
To: The Surgeon General.
Subject: Vaccination against smallpox, typhoid, and paratyphoid fevers.

In reference to your communication of January 17, 1920 (S. G. O. 300.3–4), and your second indorsement thereon, dated March 23, 1920, you are informed that it is not considered advisable to issue in a general order matter that is already partially or fully covered in other existing regulations. All sanitary regulations for the Army should, as far as possible, be included in the special regulations on that subject.

A general order, an advance copy inclosed herewith, will be issued for the purpose of insuring an immediate check of all service records and the vaccination of all men not already protected, and a future semiannual check for the accomplishment of the same purpose.

Your recommendation that recruits be held at recruit depots to complete their immunization against typhoid and paratyphoid fevers is contrary to the present policy and can not be approved. Especially in the case of one-year enlistments delay at the recruit depots makes a serious inroad upon the length of service that the soldier is capable of rendering to the Government. Furthermore, it is the experience of the War Department that the training given at recruit depots is inferior to that afforded at the actual station of the recruit. The time spent at the depot might with advantage be reduced. There is no reason why smallpox vaccinations should not be performed at recruit depots and the commanding officers of depots have been instructed accordingly. Copy of these instructions inclosed herewith.

In order to insure that replacements for overseas garrisons are fully protected, without undue delay, the commanding officers at Fort Slocum and Fort McDowell will be instructed to allow no such replacements to embark until vaccinations are completed and proper entries made on service records. A copy of these instructions is inclosed for your information.

By order of the Secretary of War:

RAPP BRUSH, *Adjutant General.*

General Orders, No. 28.

WAR DEPARTMENT, *Washington, May 12, 1920.*

VACCINATION AGAINST SMALLPOX, TYPHOID, AND PARATYPHOID FEVERS.

1. Commanding officers of all stations will at once cause an examination to be made of the service records in their commands and will require that enlisted men who have no record, or incomplete records, of vaccinations against typhoid and paratyphoid fevers and smallpox during the current enlistment, be examined by the surgeon as provided by paragraph 866, Army Regulations, and that they be vaccinated in accordance with existing regulations, and that the record thereof be made upon the service records in the appropriate place. Commanding officers of stations will require company and detachment commanders to report to them in writing when this has been accomplished. Such report will be filed so as to be available for future reference by officers of the Inspector General's Department or other competent authority. Station commanders will also direct the attention of all subordinate commanders to the necessity of strict compliance with existing regulations relative to vaccination against typhoid fever, paratyphoid fever, and smallpox, and the making of the prescribed records in connection therewith. (See S. R. No. 28, W. D., 1917; par. 866, A. R.; pars. 186–193, M. M. D., as changed.)

A similar procedure, hereafter, will be carried into effect by station commanders twice each calendar year, viz, during the months of January and July.

2. In order to insure that vaccinations begun at recruit depots or other places of enlistment, but not completed before departure, are completed without prolonging the interval between doses beyond the maximum interval allowed by regulations, the service records of all enlisted men arriving at a new station will be examined without delay, and soldiers whose vaccinations are incomplete will be reported to the surgeon, for completion of vaccination, within three days after arrival.

3. Attention is directed to the fact that under existing regulations (par. 25, S. R. No. 28, W. D., 1917), individuals who establish to the satisfaction of the responsible medical officer that they have been completely vaccinated against typhoid and paratyphoid fevers within three years, are not required to be again vaccinated against those diseases until after the expiration of the three-year period.

[720.3, A. G. O.]

By order of the Secretary of War:

PEYTON C. MARCH, *General, Chief of Staff.*

Official:
P. C. HARRIS,
The Adjutant General.

MAY 13, 1920.

720.3 (Pub. Div.).
From: The Adjutant General of the Army.
To: The commanding officer, Columbus Barracks, Ohio.
Subject: Vaccination against smallpox, typhoid, and paratyphoid.

Hereafter all recruits and applicants for enlistment arriving at your depot will be held at the depot until vaccinated against smallpox in accordance with existing regulations. Typhoid-paratyphoid vaccinations will be begun as soon after the arrival of the recruit as possible. In the case of recruits who are to leave the depot before the completion of the typhoid-paratyphoid vaccination, every effort will be made to arrange the departure of the recruit, and the time of administration of the last dose of vaccine given at the depot, so that the recruit will arrive at his destination in time to permit the succeeding dose or doses of vaccine to be administered within 10 days after the last dose given at the depot. In all cases particular care should be taken that the soldier's service record exhibits an accurate account of his vaccination status and that the service record and Form 81, Medical Department, arrive at the new station with the soldier. (See Cir. No. 285, W. D., 1919.)

If these instructions are not carefully followed, it results in the necessity of disregarding the partial immunization performed at the depot and subjecting the soldier to the annoyance of a complete revaccination.

It is desired that you acknowledge the receipt of this communication.

By order of the Secretary of War:

RAPP BRUSH, *Adjutant General.*

(Same letter sent to commanding officers, Jefferson Barracks, Mo.; Fort Logan, Colo.; Fort Thomas, Ky.; recruit depot post, Camp Travis, Tex.; recruit depot post, Fort Oglethorpe, Ga.)

PROCEDURES FOR CONTROLLING MOSQUITO BREEDING.

The extensive campaigns waged against mosquitoes during the active period of the World War was highly successful in reducing to inconsiderable figures the incidence of malaria among the troops. During the last half of the calendar year 1919 most of the remaining sanitary engineers of the Sanitary Corps were discharged from the service. The gangs of laborers already employed by the Quartermaster Department were continued at the camps where antimosquito procedures were necessary until February 29, at which date authority for their hire was revoked by telegraphic instructions from the War Department. Efforts on the part of the Surgeon General to obtain a renewal of this authorization were unavailing because of lack of funds. In this emergency it was decided by the Surgeon General to authorize the payment during the remainder of the fiscal year from funds pertaining to the "Medical and hospital appropriation" of such number of civilian laborers as were absolutely necessary for first aid antimosquito work at certain stations where the situation was most serious. These authorizations were as follows:

Camp.	Foremen.	Laborers.	Camp.	Foremen.	Laborers.
Bragg	1	15	Lee	1	5
Benning	1	15	Meade	1	5
Dix	5	65	Pike	1	15
Holabird		2	Taylor	1	5
Humphreys	1	10	Travis	1	5
Jackson	1	15	Upton	1	5
Jesup		2	Eustis	1	27
Knox	1	5	Gordon	1	5

In addition a few laborers at aviation fields were employed for antimosquito work and paid out of Air Service funds.

In the past such work, except in Panama where payment from Medical Department funds was authorized by special legislation, had always been carried out with moneys pertaining to the Quartermaster Department. The question regarding the propriety of expenditures for this purpose from the medical and hospital appropriation was at once taken up with the War Department and was decided as follows:

[5th ind.]

725.11 (Misc. Div.).

War Department, A. G. O., June 1, 1920—To the Surgeon General.

Returned. Information requested in par. 2, 4th ind., hereon, will be furnished to this office with the return of this paper through the Chief of the Construction Division, who will indicate thereon what steps his office is prepared to take to reimburse funds of the Medical Department for disbursements made, or to be made, in connection with antimosquito work at the various camps and posts between March 1, 1920, and June 30, 1920.

The decision announced in 20th ind., to the Chief of the Construction Division, dated April 5, subject, "Civilians employed on antimosquito work, Camp Shelby," is amended so as to place with the Construction Division the responsibility for em-

ployment and payment of civilians for antimosquito work, at places where necessary, after June 30, 1920. Civilians employed on this class of work will continue during the remainder of this fiscal year, under the jursidiction of the Medical Department.

On July 1, 1920, the Surgeon General's jurisdiction over this class of employees will cease and thereafter he will make, through official channels, such recommendations as to adequate measures as he considers advisable.

By order of the Secretary of War:

R. C. LANGDON, *Adjutant General.*

While this matter was pending an inspection of the antimosquito procedures in progress under the auspices of the Medical Department was made at all of the more important southern stations by a sanitary engineer from this office. On receipt of the decision given in the fifth indorsement above, recommendation was made to The Adjutant General on June 8, 1920, for the employment of such laborers as were considered absolutely necessary at stations in malarious regions. This recommendation was based upon a careful consideration of what had been accomplished during the active period of the World War, upon the report of the sanitary engineer referred to above, and upon the recommendation of the department surgeons of the Southern and Southeastern Departments. The personnel recommended is given below; at date of writing the action taken by the War Department is unknown to this office.

Station.	Engineer.	Foremen.	Laborers.	Station.	Engineer.	Foremen.	Laborers.
Bragg	1	2	40	Gordon		1	12
Benning	1	2	50	Bolling Field			2
Dix	1	1	15	Carlstrom Field		1	15
Holabird			2	Kelly Field		1	12
Humphreys		1	10	Brooks Field			5
Jackson	1	1	18	Ellington Field			3
Jesup			2	Langley Field		1	10
Knox		1	25	Love Field			2
Lee		1	25	Mitchel Field			2
Meade		1	5	Lee Hall, Va			5
Pike	1	2	50	Aberdeen Proving Grounds			2
Taylor			5	Edgewood Arsenal			5
Travis		1	15	Forts Barrancas and Pickens			3
Upton		1	5				
Eustis	1	1	27				

ANTIFLY MEASURES.

The need for an active campaign against the fly nuisance had been brought to the attention of all concerned during the mobilization of troops by means of Special Regulations 28, circulars from the War Department, and memoranda and circular letters from this office. Experience demonstrated that there was great difficulty in enforcing antifly precautions. Reports of sanitary inspectors frequently indicated an unsatisfactory situation in this regard. This office has repeatedly emphasized the necessity of action early in the season. With a view to bringing the matter afresh in the minds of medical officers the following circular letter was issued:

WAR DEPARTMENT,
OFFICE OF THE SURGEON GENERAL,
Washington, March 25, 1920.

CIRCULAR LETTER NO. 43.

Subject: Extermination of flies and mosquitoes.

1. Prompt and energetic measures must be taken to reduce to a minimum the number of flies and mosquitoes in all camps, posts, and other stations during the

approaching warm season. These measures should be directed toward the prevention of breeding and the extermination of the adult. Early attention must be given to both lines of work, as the prevention of the fly and mosquito nuisance is largely dependent upon action at the beginning of the season.

2. In order to limit the occurrence of flies and mosquitoes an active campaign must be undertaken along the following lines:

a. A careful sanitary survey should be made and all possible breeding places of flies and mosquitoes located, and the location noted on a spot map.

b. All accumulations of organic matter capable of breeding flies should be disposed of. Crude oil, borax, hellibore, and other substances should be relied on only when removal or incineration is impossible.

c. Fly traps of suitable size should be placed at each stable, picket line, and corral; at each veterinary hospital, garbage transfer station, and platform for loading manure; at each lavatory, pit latrine shelter, and garbage-can platform; at each door of a kitchen, mess room, or bakery; in each ward, ward diet kitchen and ward lavatory; and at any other place where flies congregate. (See Circular Letter No. 148, S. G. O., Mar. 22, 1919, and Circular 133, W. D., Mar. 18, 1919.)

d. Fly paper should be hung in each mess, bakery, kitchen, hospital ward, exchange, lavatory, pit latrine shelter, laboratory and morgue, and should be renewed when circumstances demand.

e. Fly swatters should be maintained in each mess room and kitchen, and in hospital wards, for use when the traps and fly paper are not sufficient to exterminate the flies.

f. All stagnant pools, when practicable, should be either drained, filled or oiled.

g. All containers capable of holding water (when not in frequent use) should be turned upside down, crushed flat or punctured in the bottom.

h. All water containers maintained for fire protection should be treated with a film of oil or a larvacide, or else the water changed at sufficient intervals to prevent mosquito breeding.

i. A well-organized system of inspection of all possible breeding places of flies and mosquitoes must be maintained. Also a system of inspection regarding the presence and proper maintenance of fly traps and fly paper.

3. A careful inspection of screening should be made at once and recommendations submitted to the proper authority for necessary repair or replacement. Frequent inspections are essential to insure that screens are kept in proper condition.

4. Particular attention should be given to the careful screening of patients with malaria and to the continuance of treatment until the individual ceases to harbor organisms. (See pars. 195 to 197, M. M. D.)

By direction of the Surgeon General.

C. R. Darnell,
Colonel, Medical Corps, U. S. A.,
Executive Officer.

PREVENTION OF RESPIRATORY DISEASES.

The unfortunate prevalence of respiratory diseases among troops has received a great amount of study from the Medical Department and constant effort has been made by the Division of Sanitation to reduce the incidence of these maladies. With the approach of fall in 1919 it was feared that there might be a return of the influenza, which had wrought such havoc in the camps in 1918 during the months of September and October. With a view to putting into force every known precaution against the sputum-borne diseases Circular Letter No. 326 (quoted below) was issued from this office. The reports called for by paragraph 3 of this circular letter were valuable in that they kept always before the surgeon the necessity of constant vigilance. The reports were discontinued after February 29, when the approach of mild weather and the great decrease in the incidence of respiratory diseases appeared to indicate that they had served their purpose.

WAR DEPARTMENT,
OFFICE OF THE SURGEON GENERAL,
Washington, October 13, 1919.

CIRCULAR LETTER NO. 326.

Subject: Precautions for the prevention of the development and spread of respiratory and other sputum-borne diseases.

1. With the onset of cool weather, it is to be expected that the incidence of respiratory and other sputum-borne diseases will increase. All of the well-known precautions for preventing the development and spread of these diseases should be instituted by you and consistently enforced. When cases occur an intensive study should be made with a view to locating the origin of the infection and limiting the development of future cases. Among the preventive measures which should be particularly investigated by you at this time, and at all times supervised, are the following:

(*a*) Adequacy of floor space and cubic air space in company barracks and in hospital wards. Marking of capacity of dormitories thereon.

(*b*) Placing men in barracks with head of one man opposite feet of adjacent men when the distance between the heads of sleepers would otherwise be less than five feet.

(*c*) Proper supervising of heating and ventilation in barracks and wards, particularly at night. Also in offices during the daytime.

(*d*) Supervision of ventilation in places of general assembly.

(*e*) Cleanliness of barrack floors and prevention of dust. Oiling of floors.

(*f*) Masking of cases with respiratory, or other sputum-borne diseases, on or before their arrival at hospital, while they are waiting distribution to their appropriate wards.

(*g*) Adequacy of compliance with Memorandum, S. G. O., January 1, 1918, with reference to the care of infectious diseases in hospitals.

(*h*) Prevention of the use of common drinking cups.

(*i*) Adequacy of the washing of dishes and mess kits. This matter, as a rule, does not receive sufficient attention, either in company barracks or in hospitals. Attention is invited to Circulars 21 and 48, and Bul. 66, War Department, 1918, which should be carefully and intelligently complied with. In hospitals particular attention should be given to the washing and sterilization of dishes in ward pantries as well as in general messes. Where steam tables are available the dishes in ward pantries may be readily sterilized in the steam table.

(*j*) Adequacy of clothing and bedding for the command.

(*k*) Adequacy of compliance with A. R. 286, par. 36, S. R. No. 28, and other sanitary regulations.

(*l*) Character and adequacy of steps to remove men promptly from barracks when they begin to feel ill. Grade of professional service at sick call. Particular attention is invited to memoranda from this office regarding prevention of infectious diseases, dated February 19, 1918, September 6, 1918, September 24, 1918, and September 30, 1918.

2. All cases of measles and influenza, however mild, should be early and carefully treated *in bed* and kept free from danger of chilling. It is believed that thereby the danger of a complicating pneumonia is greatly decreased. Attention is particularly invited to the necessity for retaining cases of measles and influenza on sick report, and either in hospital or in well-warmed barracks, for at least 10 days after the temperature has become permanently normal. Also to the necessity for considering all types of pneumonia as contagious and for handling them accordingly, and for segregating post-measles and post-influenza pneumonias from primary lobar pneumonias.

3. It is desired that you report at once to this office, attention Division of Sanitation, regarding the measures taken by you to carry out the provisions of this circular letter. Thereafter a report will be made at the end of each month. Attached are copies of certain War Department instructions bearing on the matters referred to in this circular letter. If any of the memoranda or circulars from this office referred to above are not on file you can obtain them by telegraphic request.

By direction of the Surgeon General:

C. R. DARNALL,
Colonel, Medical Corps, U. S. A.,
Executive Officer.

In the spring of 1920 the subject of respiratory disease received attention in this office and a committee was appointed to investigate the incidence of this class of infections, particularly with reference to recruit depots. Information was collected from these depots and the

possible methods of prevention were thoroughly discussed. As a result the following recommendations were submitted to The Adjutant General:

JUNE 18, 1920.

From: The Surgeon General, U. S. Army.
To: The Adjutant General of the Army.
Subject: Prevention of the spread of communicable diseases by recruits.

1. A study of the methods now used at recruit depots to prevent the introduction of communicable diseases by recruits and the subsequent spread of these diseases to other stations by accepted applicants when they leave the depots, has just been completed. This study has revealed such wide divergencies of practice in rather important matters that it is believed necessary to recommend that the following instructions be issued as a War Department order:

a. All recruits or accepted applicants for enlistment will be examined for infectious diseases immediatley upon arrival at a recruit depot. depot post, or other station. Furthermore, all such recruits and accepted applicants will be inspected twice a week, except during the presence of an epidemic, at which time the inspection will be made daily or oftener, with a view to identifying cases of communicable disease. The semiweekly inspections will be made throughout the first two weeks of residence at the station.

b. Until the physical examination for enlistment is completed, applicants for enlistment shall be quartered in individual cubicles or in dormitories allowing at least 150 square feet of floor space for each individual's bed and use; in the latter case 6 feet of space shall be left between the side bars of adjacent beds. After enlistment all recruits at recruit depots and depot posts shall be quartered in dormitories allowing at least 100 square feet of floor space for each individual's bed and use, such space to be utilized to the best advantage for the diminution of contact. At least 5 feet of space shall be left between the side bars of adjacent beds.

c. Special efforts shall be made to teach and require all recruits and accepted applicants to wash their hands as prescribed in A. R. 266.

d. After each meal all eating utensils shall be sterilized by the use of boiling water. Special attention should be given those which enter the mouth, such as spoons and forks.

e. Recruits and accepted applicants should be quartered, instructed, and fed in groups as small as possible. Recruits and accepted applicants from rural districts shall be separated from those coming from urban communities, as far as practicable.

f. All recruits will be examined for evidence of communicable disease immediately upon arrival at the station to which they are sent from the recruit depot or depot post.

M. W. IRELAND,
Surgeon General, U. S. Army.

THE INFLUENZA EPIDEMIC OF 1920.

The fear that influenza might reappear in the fall of 1919 was not realized and it began to be hoped that the winter would pass without this visitation. However, in January, 1920, the disease began to occur almost simultaneously in civil and military communities, the earliest epidemics being largely confined to the areas about the Great Lakes. Camp Grant was the first station seriously affected. The disease rapidly spread to other areas and the incidence of pneumonia promptly began to increase. On the report of the first cases the attention of all concerned was called to the provisions of Cucular Letter 326, quoted above. Daily telegraphic reports of all new cases of influenza and pneumonia and of the deaths therefrom were instituted. Fortunately, the epidemic proved to be far less menacing than that of 1918, the incidence of influenza, the ratio of pneumonic complications, and the mortality rate all being very much lower. These differences are clearly shown by the following comparative tables, which are based on the weekly reports received in the section of current statistics:

TABLE 87.—*Annual admission rate per 1,000 for influenza and pneumonia, and death rate per 1,000 for all diseases, during the influenza epidemic of 1918 compared with the same rates during the influenza epidemic of 1920.*

ALL TROOPS IN THE UNITED STATES.

Week ending—	Admission rates per 1,000 for—		Death rate per 1,000 (all diseases).	Week ending—	Admission rates per 1,000 for—		Death rate per 1,000 (all diseases).
	Influenza.	Pneumonia.			Influenza.	Pneumonia.	
Sept. 13, 1918	(1)	10.22	2.37	Jan. 9, 1920	3.25	1.77	6.80
Sept. 20, 1918	371.08	24.06	4.47	Jan. 16, 1920	116.30	6.44	8.78
Sept. 27, 1918	1,211.19	137.67	32.49	Jan. 23, 1920	187.70	18.99	7.52
Oct. 4, 1918	2,878.53	281.58	81.82	Jan. 30, 1920	466.29	30.72	12.53
Oct. 11, 1918	2,949.00	591.51	206.41	Feb. 6, 1920	371.19	58.14	28.10
Oct. 18, 1918	1,474.40	370.66	190.19	Feb. 13, 1920	251.48	28.10	20.15
Oct. 25, 1918	676.37	201.93	92.71	Feb. 20, 1920	207.29	15.01	10.89
Nov. 1, 1918	627.97	98.85	43.15	Feb. 27, 1920	120.31	10.64	10.05
Nov. 8, 1918	233.45	81.08	33.05	Mar. 5, 1920	87.35	7.21	6.65
Nov. 15, 1918	122.00	44.96	19.76	Mar. 12, 1920	49.30	6.05	9.64
Nov. 22, 1918	132.13	36.35	13.76	Mar. 19, 1920	50.28	6.90	6.08
Nov. 29, 1918	102.29	38.73	13.26	Mar. 26, 1920	29.91	6.43	5.87
Dec. 6, 1918	143.67	39.67	11.72	Apr. 2, 1920	15.05	7.23	5.21
Dec. 13, 1918	141.49	41.35	14.92	Apr. 9, 1920	10.94	5.62	3.55
Dec. 20, 1918	89.03	37.03	13.73	Apr. 16, 1920	2.91	2.04	4.37
Dec. 27, 1918	59.20	26.44	12.17	Apr. 23, 1920	1.77	2.06	3.83
Jan. 3, 1919	67.73	27.80	9.98	Apr. 30, 1920	.90	2.10	4.67
Jan. 10, 1919	105.39	31.65	13.28	May 7, 1920	2.67	1.23	3.07
Jan. 17, 1919	112.56	41.65	15.66	May 14, 1920	1.22	2.75	1.52
Jan. 24, 1919	92.50	39.19	15.65	May 21, 1920	1.59	1.59	4.39

[1] No record.

During the summer of 1918 the death rate had been progressively decreasing week by week and had reached an extremely low figure in the first half of September. Upon this low death rate the enormous mortality resulting from the influenza was engrafted. On a chart the change is most striking. The slow decline in death rate and in the influenza and pneumonia incidence during November, December, and January was undoubtedly due in large part to the winter season following the epidemic. In 1920 the reverse conditions existed. The death rate before the onset of the epidemic was higher than in the first half of September, 1918, being about the normal rate for winter months. The increment in deaths resulting from the influenza was trivial compared with that of 1918, and the death rate, as well as the pneumonia incidence, soon dropped to a relatively low figure with the subsidence of the influenza epidemic and the onset of mild spring weather.

The number of cases of influenza and pneumonia at the principal camps and the total for all troops in the United States (as shown by the weekly telegraphic reports received in the current statistics section) are given below for the period of the epidemic.

Influenza incidence from Jan. 2 to Mar. 26, 1920, inclusive.

Camps.	Strength (average).	Influenza.		Pneumonia.		Deaths, influenza and pneumonia.	
		Cases.	Annual admission rates per 1,000.	Cases.	Annual admission rates per 1,000.	Number.	Annual rates per 1,000.
Benning	1,870	208	481.82	11	25.67	0	.....
Bragg	853	0	.....	2	10.55	0	.....
Custer	1,074	136	604.28	5	20.48	0	.....
Devens	1,795	0	.....	1	2.23	0	.....
Dix	5,528	138	108.18	23	18.09	5	3.97
Dodge	2,024	180	385.38	8	17.29	2	4.45
Funston	2,504	0	.....	10	17.17	0	.....
Gordon	3,017	249	390.12	21	32.81	4	6.30
Grant	4,857	513	456.75	42	37.39	14	12.53
Holabird	2,956	69	101.15	0	.....	0	.....
Humphreys	867	37	184.54	1	4.61	0	.....
Jackson	3,243	88	114.40	4	5.24	2	2.76
Knox	1,407	200	616.20	24	73.91	4	13.50
Lee	1,539	0	.....	1	2.60	1	2.60
Meade	3,757	0	.....	12	13.84	6	6.92
Meigs	655	0	.....	0	.....	0	.....
Normoyle	1,066	0	.....	0	.....	0	.....
Pike	3,971	67	73.03	17	18.65	2	2.27
Sherman	1,604	0	.....	2	5.61	0	.....
Taylor	6,903	541	339.56	44	27.67	17	10.72
Travis	3,032	0	.....	0	.....	0	.....
Upton	3,035	380	465.91	45	55.16	10	12.16
All troops in United States	181,885	6,747	160.76	690	16.45	262	6.24

PRECAUTIONS AGAINST BUBONIC PLAGUE.

The appearance of bubonic plague in Mexico and the occurrence of three deaths from the disease in Pensacola and one in Galveston about the middle of June led this office to make recommendations as shown in the following letter, with a view to being prepared for a possible extension of the disease:

JUNE 18, 1920.

From: The Surgeon General of the Army.
To: The Adjutant General of the Army.
Subject: Eradication of rats.

1. In view of the appearance of bubonic plague in Mexico and the occurrence of several cases in cities in this country, it is recommended that commanding officers of all military stations be instructed as follows:

"In view of the occurrence of bubonic plague in Mexico and several cities in this country, it is necessary to inaugurate measures for the elimination of rats in every military command. With this end in view steps should be taken to destroy rats by means of traps, poison, and the use of cats; to render buildings rat-proof as far as practicable; and to reduce sources of food supply for rats. Particular attention should be taken to keeping garbage cans carefully covered, to destroying accumulations of organic matter, and to rat proofing kitchens, pantries, commissary warehouses, stables, and buildings in which grain is stored. Public Health Bulletin No. 103, which describes methods for the destruction of rats, has been mailed direct to the surgeon of your station by the Surgeon General.

"All rats caught or found dead at military stations, where the necessary laboratory facilities are available, will be examined bacteriologically with a view to determining if they are infected with plague. Particular attention should be paid to the collection and prompt examination of any rats found dead from natural causes."

2. It is further recommended that these instructions be transmitted to the commanding generals of the Southern and Western Departments by telegraph; also by telegraph to independent stations located within the geographical limits of these two departments.

M. W. IRELAND,
Surgeon General, U. S. Army.

Section of Sanitary Inspections.

At the beginning of the fiscal year there were three inspectors on duty with this section, the activities of which were but little less than during the preceding six months. Indeed, it was found that inspection was even more necessary than during the active period of the war because of the tendency to relaxation in all sanitary matters. Relative inexperience on the part of both line and medical officers and loss of the enthusiasm which had existed during the period of war preparation appeared to be the fundamental causes of this condition. The most common and outstanding defect noted was the failure to maintain proper records of smallpox and triple vaccination. General Orders, No. 132, War Department, December 19, 1919, which went into effect on January 15, 1920, placed within the jurisdiction of department commanders a large number of stations formerly under the direct control of the War Department and which had been regularly visited by sanitary inspectors from this office. It was decided by the War Department that in future no sanitary inspections of such commands would be made from Washington. This change, together with the rapid closing of general hospitals, greatly reduced the number of inspections required, and during the last six months of the year but one officer has been engaged in this duty.

During the year an analysis of the inspections made throughout the entire war period has been completed. Defects and irregularities noted have been extracted and arranged under their proper subheads. The manuscript produced contains over 625 typewritten sheets and furnishes ready opportunity for the study of any specific subject in the light of the observations of sanitary inspectors during the World War. The total number of individual inspections made during this period was over 1,400, all large stations having been visited many times. The reports of these inspections, together with the analysis referred to, constitute an important historical record of the inception, growth, and decline of these great military communities.

As a result of its experience during the World War, this office is deeply impressed with the value of sanitary inspections not only for the purpose of detecting and correcting defects, but also as a means of stimulating and educating the local medical and line officers. With the object of insuring frequent inspections of commands under the jurisdiction of department commanders, upon request of this office, dated August 15, 1919, the following letter was sent by The Adjutant General to the commanders of departments within the limits of the United States:

> The department commanders in the United States are authorized to order their department sanitary inspectors to posts and stations under their control for such sanitary inspections from time to time as they deem expedient.
>
> By order of the Secretary of War.
>
> Charles J. Kindler, *Adjutant General.*

On March 3, 1920, these instructions were superseded by Section II, General Orders, No. 13, War Department, which reads as follows:

> II. *Sanitary inspections.*—Department commanders will cause the department surgeon or the department surgeon's assistant, to make one sanitary inspection each six months at each post, camp, or station under their control where troops or detachments of the Army are stationed, including the places enumerated in paragraph 2, General Orders, No. 132, War Department, 1919 (jurisdiction of department com-

manders). The reports of such inspections will be made to department commanders, who will forward one copy of each such report to The Adjutant General of the Army for the information of the Secretary of War and the Surgeon General. (721, A. G. O.)

This authority places the inspection service of the geographical departments upon an excellent standing. In order to promote uniform and complete inspection and report, the inspection section of this office devised a questionnaire and form for report covering all details of general and hospital sanitary administration. Department surgeons have been directed to require their sanitary inspectors to report upon the subheads included in this questionnaire, a copy of which ultimately reaches this office through military channels.

Medical Records Section.

Since July, 1919, a vast number of miscellaneous medical records have been received in this office from the Medical Department organizations of the Army in addition to the regular monthly reports of sick and wounded. These include notifications of discharge on certificate of disability, clinical records, various special reports, and all the other retained papers from discontinued hospitals, infirmaries, ambulance companies, and other units in this country and abroad. Similar retained records have also been forwarded from all general and base hospitals which ceased to function as such and were converted into camp or post hospitals. The distribution of these papers, with the filing of the clinical records and the forwarding to The Adjutant General's Office of such of the other record matter as it was not proper to retain in this office, has necessarily entailed a large amount of clerical work.

Approximately 2,000,000 clinical records are now on file by individual hospitals and classified as to diseases according to hospital register numbers. It is now possible to obtain the clinical history sheets for any particular disease, or class of diseases, treated in a military hospital, provided the index of disease was prepared by the hospital as directed by this office. In most instances the indexes of diseases have been well kept; in a few they are defective. Furthermore, when information in addition to that included on the report card (Form 52, M. D.), or on the field medical card, is needed relative to any soldier formerly sick in hospital, it can be obtained from the file by the use of the hospital register number.

"Physical Examination of the First Million Draft Recruits," as published in Bulletin No. 11, War Department, Office of the Surgeon General, was prepared by this section. It was printed and delivered by the Government Printing Office during the latter part of June, 1919. A complete study of the "Defects Found in Draft Recruits," covering not only the physical examinations of the men sent to military camps but also of all those rejected by the local boards as physically disqualified, has also been prepared. The text of this study was printed by the Government Printing Office for the information of the Senate Military Committee. The remainder of the entire study, including 52 full-page illustrations and the appendix tables, giving all the information in detail, is now in the hands of the Government Printer. This publication will furnish more complete and detailed information relative to the physical condition of the young

men of military ages in the various sections of this country than has ever before been available.* A similar study was prepared in the office of the Provost Marshal General, under the direction of Col. J. H. Baxter, chief medical officer of the Provost Marshal's Bureau, after the close of the Civil War. The necessary money was appropriated by Congress in 1866, and a two-volume report was published by the Government Printing Office in 1875. It furnished valuable information in regard to the physical condition of the draft recruits of that period. However, it of necessity covered only the recruits from the loyal States, and even for them only the rejections were dealt with. In the present publication all defects that were noted by examining boards are considered, whether cause for rejection or not. It will be practicable to determine for any section of the country, and for urban and rural sections separately, the relative and absolute number of the various defects noted in the men from those areas. It is also from this publication that the necessary information must be obtained by the military establishment in regard to the future physical fitness of the military population of the country.

Special physical measurements were made on approximately 104,000 soldiers upon demobilization, under the direction of the medical records section, at the request of the equipment branch of the Purchase, Traffic, and Storage Division of the War Department. These measurements have been codified, tabulated, and worked up in statistical tables. Data have been prepared from which a suitable number of manikins are now being manufactured upon which uniforms are to be fashioned. These uniforms will, in all probability, be better adapted to the forms of the American soldiers than any hitherto available. Tables have also been prepared giving the distribution of the various sizes by States. Should another large mobilization for military purposes be necessary, uniforms can be distributed to the various States with due regard to the needs of the soldiers called from them.

An anthropological study of military personnel has been practically completed and will be ready for publication in a short time. This publication will give more complete and definite information than has hitherto been available relative to the stature of the young men of this country. The data for this study were obtained from the following sources:

a. Normal height, weight, and chest measurements of 1,000,000 draft recruits.
b. Height, weight, and chest measurements, with their interrelation to special diseases or defects, from 2,000,000 draft recruits.
c. Special anthropological measurements from the 104,000 soldiers measured to obtain data for uniforms.

Since the war work of the medical records section is practically concluded, with the exception of the completion of the statistical section of the "Medical and Surgical History of the War," and the preparation of the statistical tables for the report of the present year, it seems appropriate to give a brief résumé of the expansion and the work that has been accomplished during the last three years.

(1) Prior to 1917, 14 clerks were employed in the medical records section. During the war period the force has varied from 31 in July, 1917, to a maximum of 342 in January, 1919, from which it has been gradually reduced to 42 in June, 1920. For July, 1920, the number will be 25, or 6 less than in July, 1917. The mean average by months has been 154.4. The numbers given are not monthly averages, but are the

*Since the above was written the publication of the study, "Defects found in drafted men," has been completed.

maximum number of clerks employed during the months. Since there were additions and losses, the average actual number was less. Probably the actual average for the period would not exceed 145.

(2) Over 10,000,000 individual reports of sick and wounded soldiers have been received, verified, filed in dictionary order, and statistical information taken therefrom.

(3) The necessary correspondence has been conducted to insure the receipt of sick and wounded reports from every hospital or command in this country and abroad, and to correct errors in reports received from all points, except in the American Expeditionary Forces.

(4) Two million clinical records have been received, sorted, and filed by hospitals.

(5) A coding system has been devised, a coding book prepared and published, and statistical cards drawn up.

(6) In addition to the coding of the statistical information from the 10,000,000 individual records of sick and wounded soldiers data have also been abstracted and coded from 2,000,000 reports of physical examination of recruits at camps, and from 500,000 reports of men rejected as physically disqualified by the local boards.

(7) From the sick and wounded cards, the physical examination reports, and the casualty cablegrams received from the American Expeditionary Forces, over 8,000,000 Hollerith cards have been prepared, punched, verified, sorted, and tabulated. These were used as follows:

(*a*) Seven hundred thousand in the prepartion of the statistical tables of the Surgeon General's annual report for 1918.

(*b*) Three million in the preparation of the statistical tables of the Surgeon General's annual report for 1919.

(*c*) Two million five hundred thousand in the preparation of the statistical tables of the "Defects Found in Drafted Men." One million of this number also in preparation of the "Physical Examinations of the First Million Draft Recruits, Methods and Results": two million in the preparation of the anthropological study to be published, in addition to the 104,000 for the special measurements of the soldiers for uniforms.

(*d*) Seven hundred thousand in the preparation of the weekly reports of casualties as received by cablegram. The reports were prepared for the statistical branch of the Office of the Chief of Staff.

(*e*) Nine hundred thousand are being used in the preparation of the statistical table of this report.

(8) The reports, referred to above as prepared for the statistical branch of the Office of the Chief of Staff, showed for each week the casualties of that week by 21 general headings, such as killed in action, died of wounds, etc., subdivided by the various arms of service. Since the data for these reports were obtained from the casualty cablegrams in which corrections were made at times for many weeks previous, it was necessary each week to prepare correction sheets for preceding weeks. This frequently entailed the preparation of 50 or more tabulation sheets in one week. These reports furnished the only information in the United States upon which the need for replacements could be estimated.

(9) A dictionary file was maintained, showing the addresses of all soldiers invalided from the American Expeditionary Forces. This file was used by the office of The Adjutant General to redirect mail returned from overseas to the invalid soldiers. Thousands of addresses were obtained in this way.

(10) The "Physical Examinations of the First Million Draft Recruits, Methods and Results," and "Physical Defects Found in Drafted Men" have been prepared and published.

(11) Data tabulated and statistical tables prepared from the special measurments of 104,000 soldiers for the preparation of uniforms.

(12) An anthropological study practically completed.

(13) The statistical tables were prepared and the statistical discussion written for the annual reports of 1917, 1918, and 1919.

(14) A large number of statistical tables for the "Medical and Surgical History of the War" are partially completed.

(15) Finally, though by no means of the least importance, information has been furnished in thousands of cases through the Office of The Adjutant General to anxious relatives and friends of sick, wounded, and deceased American soldiers abroad. In a large number of instances the first news available for relatives or friends was obtained from this file. Information has also been furnished, through the Office of The Adjutant General, in thousands of cases for beneficiaries of the war risk insurance.

(16) Prior to 1917 the estimated number of individual reports received and handled each year was approximately 200,000. During the war period, the yearly average was approximately 4,000,000. Thus more than *twenty times* the number of records have been handled and much additional work done with approximately *ten times* the clerical force.

Current Statistics Section.

The collection of current statistics has continued weekly throughout the year, but owing to the reduced size of the camps, the diminution in the amount of infectious disease, and the necessity for economy in the use of the telegraph, a change in the method of reporting was made by substituting special delivery letters for telegrams in all except the more distant sections in the West. Futhermore, every station, even though under the jurisdiction of the department commanders, was required to send a carbon copy of its weekly report direct to the Surgeon General in order that he might have at hand details regarding the movement of infectious diseases throughout the Army. The changes above enumerated were put in force by means of the following instructions:

November 18,1919.

From: The Surgeon General of the Army.
To: The department surgeon, Central Department, Chicago, Ill.
Subject: Weekly telegraphic reports of sick.

1. In compliance with Circular 493, War Department, October 28, 1919, the weekly telegraphic report of sick from your department, may, in future, be forwarded by special-delivery mail. In order that the arrival of this report in this office may be sufficiently prompt it is imperative that it be placed in the mail on Friday night of each week.

2. In the event of an unusual or alarming occurrence of infectious disease, it is desired that you, at your discretion, make the report by telegraph.

For the Surgeon General:

W. P. Chamberlain,
Colonel, Medical Corps.

(Sent also to department surgeons of Eastern Department, Northeastern Department, and Southeastern Department.)

A similar letter was sent to the surgeons of all stations not under department commanders except those west of Camps Dodge, Funston, and Pike.

January 6, 1920.

From: The Surgeon General of the Army.
To: The department surgeon, Southeastern Department, Charleston, S. C.
Subject: Weekly report of sick.

1. In order that this office may continue to have prompt information regarding the health of the different camps and cantonments after the fifteenth of January, when the camps and cantonments now administered directly by the War Department come within the control of department commanders, under the provisions of G. O. No. 132, W. D., 1919, it is requested that you instruct each surgeon of such commands in your department to forward a copy of the weekly report of sick and injured (Form 86, Med. Dept.) direct to this office by special-delivery mail on Friday night of each week. This is done at present by all such stations except far western and southwestern ones, which are reporting by telegraph. Those heretofore reporting by telegraph should in future send special-delivery reports. Instead of using *coded* special-delivery letters, as is done at some stations, the report should be made on Form 86, Medical Department, modified as necessary to conform with instructions issued by the Surgeon General since the form was printed, and including the additional information called for by Circular Letters 267, 346, and 370, S. G. O., 1919. It should be forwarded by special-delivery mail. The original of the Friday morbidity report, or such other special-delivery or telegraphic information as you require, should be sent to your office for embodiment in your weekly report as in the past.

2. Similar report direct to this office is also desired from *all other stations or districts* in your department, whether temporary or permanent, which render weekly reports to your office.

3. The consolidated weekly morbidity report by telegram or special-delivery letter to this office will be made by you as heretofore, including all troops under the jurisdiction of the department commander.

4. It is desired that you submit to this office as soon as possible after January 15 a list of the stations or districts from which you receive the individual reports on which you base your consolidated report.

By direction of the Surgeon General:

W. P. CHAMBERLAIN,
Colonel, Medical Corps.

During the last half of the year, in conjunction with the Division of Laboratories and Infectious Diseases, a considerable amount of effort has been expended upon the devising of a new form 86, Medical Department, for use in reporting weekly morbidity statistics. This revision aims to provide more accurate details regarding communicable diseases. The new form has been practically completed but not put into use as yet.

SECTION OF PHYSICAL EXAMINATIONS.

This section, formerly a subsection of the miscellaneous section, has been very active during the major portion of the year. Its work has included supervision of the physical examinations connected with the strenuous recruiting campaign and with the conclusion of demobilization, the analysis on discharge for disability, the preparation of a set of physical standards for the Reserve Officers' Training Corps, and the compilation of nontechnical instructions as to physical examination for the use of recruiting officers of the line. Late in the year the question of the physical standards to be required in the case of officers about to be commissioned under the provisions of the reorganization bill received careful consideration, and appropriate recommendations were submitted to The Adjutant General. The more important details connected with these functions are shown in the following pages.

PHYSICAL EXAMINATION PRIOR TO DISCHARGE FROM SERVICE.

DEMOBILIZATION.

The physical examination of military personnel prior to demobilization.—Circular No. 73, issued by the War Department on November 18, 1918, directed that a careful physical examination be made of every officer and soldier prior to his discharge from the Army; that the results of such examinations be recorded on a prescribed blank form (Form No. 395–1, A. G. O., for officers and 135–3, A. G. O., for enlisted men) and mailed to The Adjutant General of the Army for permanent file; that in every case in which there was found to exist a wound, injury, or disease that disabled or was likely to result in either disability or death, or in every case in which the soldier claimed to be suffering from a disability, that a copy of the physical records be sent to the Bureau of War Risk Insurance, Washington, D. C., where compensation could be adjudged in accordance with the disability existing.

It was further directed that in order to make the physical examination as thorough and comprehensive as possible it be performed, wherever practicable, by boards of medical examiners, composed of a chief medical examiner and a sufficient number of specialists. The

scheme of organization to be used in composing these boards was as follows:

	No. of examiners.
(1) General examination, including skin, general surgery, hemorrhoids, varicocele, varicose veins, etc.	3
(2) Dental	1
(3) Orthopedic, including bones and joints	3
(4) Eyes	1
(5) Ears, nose, and throat	1
(6) Cardio-vascular	3
(7) Tuberculosis	6
(8) Neuropsychiatric	3
(9) Board of review	2
Total	23

Experience in conducting the physical examination of the draft Army had demonstrated that a board of the composition given above could examine 1,000 men per day, and when necessary could handle temporary emergency increases of 25 per cent. In order that all concerned might have full knowledge of what was expected of them, instructions were issued by the Surgeon General's Office, November 21, 1918.

The work of demobilizing the Army of over 4,000,000 men proceeded in practically every military station in the United States, but it was in certain of the larger camps and cantonments that the major portion was accomplished. These camps were designated by the War Department as "demobilization centers," of which the following were the principal ones:

Camps Custer, Mich.; Devens, Mass.; Dix, N. J.; Dodge, Iowa; Funston, Kans.; Grant, Ill.; Gordon, Ga.; Jackson, S. C.; Lee, Va.; Lewis, Wash.; Meade, Md.; Pike, Ark.; Presidio of San Francisco, Calif.; Shelby, Miss.; Sherman, Ohio; Taylor, Ky.; and Upton, N. Y.

It was the policy of the War Department to send men for discharge to the camp nearest their place of enlistment or induction, and every effort was made to carry out this plan with divisional organizations, though it was not possible in the case of many overseas divisions, whose original personnel had been greatly changed by replacements.

The rate of demobilization depended almost entirely upon the amount of transportation available for bringing the troops from Europe. This factor, being an uncertain one, resulted in a very uneven flow of men to the demobilization centers, and constituted the greatest difficulty with which the Medical Department had to contend. Orders were issued by the War Department early in 1919 that all men must be discharged within 48 hours after reaching camp. When, as was the case on the return of a division from Europe, large numbers of men suddenly arrived in camp for discharge, the examining boards would be overwhelmed with work. After the unit had been mustered out, no large number of troops might appear for demobilization during a week or more. This resulted in enforced idleness, dissatisfaction, or discontent among the examining personnel. As very little advance notice was received of prospective dates of demobilization of divisional troops, it was necessary to keep large examining boards on duty in demobilization centers to provide for this contingency. Had the rate of demobilization been steady and

regular, it would have been possible to have dispensed with at least 20 per cent of the examining personnel.

All soldiers about to be discharged were examined in one of two ways: (1) By the demobilization examining board, known as the "mill" and described above. All men who were *not unfit* for further military service were examined by these boards. This class constituted over 99 per cent of the forces. (2) By the disability boards. These were boards composed of two or more medical officers, authorized by paragraph 159, Army Regulations, for the examination of soldiers *incapacitated for further military service.* Less than one-half of 1 per cent of the individuals demobilized were examined in this manner.

The camp examining boards were, in the main, organized to conform to the requirements of Circular 73, War Department, November 18, 1918. At the signing of the armistice, in all the larger camps the major portion of the personnel of the draft examining boards were still on duty. As the process of demobilization was simply a reversal of the draft procedures, these groups of officers were continued on duty as demobilization examining boards, being augmented on recommendation of this office wherever necessary. Every effort was made by the Surgeon General to maintain the standard of the examining personnel at as high a plane as possible. Officers were detailed who not only were specialists in their particular branch of medicine but who from past experience were peculiarlily fitted fo this class of work. An attempt was made to regulate the size of the board by the prospective number of examinations to be made at the particular camp, but, as previously stated, owing to irregularity of troop transportation, this was an impossibility.

The routine of examination employed by the various boards will not be given here. With the exception of the duties of the board of review, it was practically the same as that employed during draft examinations. The difference in the methods used by various camps was largely the result of local conditions and facilities at hand. The board of review consisted of two or more medical officers, especially selected for their wide experience and sound judgment in the matter of physical disabilities. If a disability was discovered by an examiner and the soldier possessing it had made no claim, or if the soldier had made a claim for disability and none had been found upon examination, he was sent before the board of review, which decided whether or not the disability existed, and if so, to what degree. In some camps this board acted in a judicial capacity upon all men in whom any disability was found, and determined the degree of disability in each case.

All soldiers found to have a disability of 10 per cent or more were reported to the Bureau of War Risk Insurance. Degrees of disability were adjudged by taking into consideration the soldier's prior occupation in civil life and the nature and extent of his disability. Although the percentage of disability decided upon by the camp board was reported in each instance to the Bureau of War Risk Insurance, it was done merely as a guide and was not final, as the Bureau of War Risk Insurance made its own decision regarding the degree of disability in all cases.

Records are on file of the results of 3,133,921 physical examinations made by demobilization examining boards (for discharge on

Forms No. 135–3 and 395–1, A. G. O.) during the period from November 11, 1918, to December 31, 1919, and of 20,755 examinations made by disability boards (for discharge on Form No. 17, A. G. O.) between February 1, 1919, and January 31, 1920. The total of these, 3,154,676, falls short of the entire number examined during this period, which was approximately 3,350,000, but is sufficiently large to serve as an illustration of the physical status of the Army at that time. Of the total number examined by demobilization boards (on Forms No. 135–3 and No. 395–1, A. G. O.), 2,936,780, or 93.7 per cent, of the officers and enlisted men were discharged with either no disability or one of less than 10 per cent; 166,089, or 5.3 per cent, were reported to the Bureau of War Risk Insurance as having a disability of 10 per cent or over; 24,293, or 0.7 per cent, were held on account of communicable diseases, mostly venereal; 4,368, or 0.1 per cent, were held until they attained a maximum degree of improvement; and 2,391, or 0.07 per cent, were held for other causes.

The figures given above include limited service men and the units of the Students' Army Training Corps, since no separate figures are available covering these two classes. Approximately 70,000 limited service men were inducted, and many of these were undoubtedly discharged upon surgeon's certificate of disability (Form No. 17, A. G. O.) during 1918–19. It is not known how many limited service soldiers were examined for discharge on Form No. 135–3, A. G. O., by the camp boards. War Department instructions required that in the case of all limited service men examined the words "special or limited service" be stamped across the front of Form No. 135–3 before the examination took place. This was to be done in order that the examining boards might determine whether or not defects which existed prior to induction had become aggravated and whether new defects had been acquired since induction. Unfortunately, owing to absence of service records or other official sources of information, these instructions were not followed out in the majority of cases, and the boards had no means of determining the status of such men except from the statement of the individual.

The following table shows the results obtained by the medical examining boards at 17 of the largest stations from November 11, 1918, to December 31, 1919:

	Number examined.	Number of disabilities reported.	Percentage.
1. Dix	316,336	23,105	7.30
2. Grant	236,877	5,968	2.53
3. Dodge	210,455	14,782	7.02
4. Upton	202,675	6,351	3.13
5. Sherman	188,829	14,815	7.85
6. Taylor	153,516	17,811	11.60
7. Devens	141,001	22,767	16.14
8. Lee	138,271	7,167	5.18
9. Gordon	121,291	981	.81
10. Pike	111,112	2,812	2.53
11. Meade	95,018	2,243	2.36
12. Funston	92,032	3,336	3.62
13. Custer	86,432	2,106	2.44
14. Lewis	66,535	1,167	1.75
15. Jackson	68,243	1,954	2.86
16. Presidio of San Francisco	52,839	2,174	4.11
17. Shelby	42,390	492	1.16
	2,323,852	130,060	4.84

The greatest variation will be noted in the percentage of disabilities found by the different camp boards. This would be entirely impossible of explanation had the boards interpreted War Department instructions in the same manner and followed them accordingly, i. e., if all men who, according to existing regulations, should have been discharged by disability boards were discharged by that method. This was not the case, though to what extent is not definitely known, as complete reports of all camp disability boards are not available. It is known, however, that in certain camps practically all men discharged were examined by the camp examining board, regardless of whether or not they were permanently incapacitated for further service. This tended to raise the percentage of disabilities found by the camp board. In other stations the board examined only those men who were not incapacitated for further service, all others being handled by the disability boards. This greatly lowered the number of disabilities reported by the camp board.

The reason for the difference in procedures in the various camps was due to two facts: (1) There was seemingly much confusion and misinterpretation of current instructions as to who should, and who should not, be examined by the camp boards. Although no instructions were ever issued revoking paragraph 159, Army Regulations, relating to disability boards, it was evident that some camp surgeons were under the impression that such was the case; (2) men could be disposed of in a much shorter time if examined by the camp board, as it was usually 10 days or 2 weeks before the proceedings of disability boards were approved, owing to the fact that the papers had to be passed upon by department surgeons. This resulted in crowding camp hospitals, convalescent camps, and development battalions with men awaiting discharge, a condition which some camp commanders were desirous of avoiding. It is believed that this fact largely influenced the camp surgeons in their interpretation of the current instructions on the subject.

As a matter of fact, it was immaterial to the welfare of the individual soldier whether he was examined by a demobilization or a disability board, providing his disability, if one existed, was properly reported to the Bureau of War Risk Insurance. The attitude taken by the Surgeon General's Office in the matter can best be illustrated by quoting the following telegram:

MAY 6, 1919.

CAMP SURGEON,
Camp Grant, Ill.:

Soldiers permanently incapacitated for military service should be discharged on Form 17. It has been the practice in some camps to discharge on Form 135–3, and there has been no objection thereto, provided copy of Form 135–3 is furnished War Risk Bureau and registrar card Form 52, Medical Department, is made in the case and forwarded to Surgeon General (see Circular Letter, Dec. 6, 1918). Present orders may be interpreted to authorize discharge on either Form 135–3 or Form 17. This office considers it preferable that permanently disabled be discharged on Form 17.

IRELAND.

Although there is no doubt that the examinations at some camps were conducted with a greater degree of efficiency than at others, it is obvious from the preceding paragraphs that a comparison could not be made with fairness, unless all had used the same procedures. It is a curious fact that in the northern tier of camps a greater percentage of disabilities were found. The fact that the greater part of demobilization was done in the summer months and that the

work of physical examination, arduous and monotonous at best, was made more so by increased temperature, may have exerted some influence.

Other factors which would tend to produce a variation in the number of disabilities found by different boards were as follows: The preponderance of special and limited service men in some camps; the difference in the facilities and arrangements for conducting examinations; the pressure exerted on some boards, where entire divisions were demobilized in one camp; the difference in the physical characteristics of certain overseas divisions; and, finally, the difference of opinion existing among the various boards as to what constituted a 10 per cent disability. No definite instructions upon this latter phase being extant, it was left entirely to the judgment of the individual examiners to determine whether or not a soldier had a reportable degree of disability. By thus permitting the human element to enter, variations naturally resulted.

The following table gives the classification of disabilities, with percentages, reported by the camp examining boards to the Bureau of War Risk Insurance from April 1, 1919, to December 31, 1919, the total number examined during this period being 2,261,927:

Classification.	Number of disabilities.	Percentage of the total number of disabilities.
General surgical and skin	13,532	24.96
Orthopedic	12,711	23.44
Ophthalmological	4,639	8.55
Oto laryngological	4,444	8.19
Respiratory	4,260	7.86
Cardio-vascular	2,555	4.71
Neuro-psychiatric	2,489	4.59
Venereal	975	1.80
Miscellaneous, including dental	8,615	15.88
Total disabilities reported	54,220	100.00

The high percentage of surgical and orthopedic disabilities was to be expected; likewise the rather large number of the ophthalmological and respiratory groups, as many of these were no doubt the result of gas. The low number of venereal cases reported is probably due to the fact that existing instructions required examiners to refer all cases of this type to the camp hospital for further treatment before discharge, and only those are reported in whom further intensive treatment failed to produce a cure.

This office does not contend that a thoroughly satisfactory physical examination was made in the case of each individual soldier. The vast number of men demobilized, the short space of time allotted for the purpose and the extreme irregularity with which they were returned from Europe obviously made such a result impossible. It is thought, however that the examiners were generally conscientious and that the examinations were as thorough as could be expected under the circumstances. Two factors operated to make the work of the boards more difficult: (1) The desire of the War Department to demobilize the Army with the least expenditure of time and money. This led to the order that all men sent to a camp for demobilization must be discharged within 48 hours after arrival; also to the issue of the weekly report showing the cost of discharge per man in each camp,

which stimulated a rivalry among camp commanders and resulted in additional pressure being brought to bear upon examining boards. (2) The extreme desire of the individual soldier to be discharged and returned to civil pursuits. This, although perfectly natural, reacted through the soldier's friends and relatives, thence to the general public, and finally upon the War Department.

Camp or other senior surgeons were charged with the responsibility for the conduct of the examining boards. The reports made by the sanitary inspectors afforded the only means of direct observation and supervision possessed by this office. This proved satisfactory, however, and enabled recommendations and changes to be made from time to time which materially improved conditions. The most frequent criticisms made by the sanitary inspectors were as follows:

(1) *Dental examination.*—Several boards were reported as not recording absent or defective teeth. The space on Form 135–3, A. G. O., was marked normal when the soldier possessed the minimum number of teeth required by existing standards.

(2) *Orthopedic.*—Several criticisms were made that this examination, when conducted by groups, failed to detect a disability which the soldier desired to conceal. Group examination was a result of haste.

(3) *Cardio-vascular and tuberculosis.*—Criticism was made that the rooms used for this purpose in certain camps were not sufficiently quiet to permit of careful examination of the heart and lungs. The noise and confusion attendant upon the examination of hundreds of men would tend to produce this result unless sound-proof partitions were installed.

(4) *Eye, ear, nose, and throat examination.*—Complaint was made that the eardrum was not routinely examined in all cases. In one camp it was reported that there was no "dark room" available for special examination.

(5) *Neuro-psychiatric.*—The group method was also used in most camps for this examination. This was also reported as being too superficial to detect a disability which the soldier desired to conceal.

The above criticisms, which were all obviously the result of the desire to "speed up," were corrected as far as possible whenever found.

The following are extracts taken from the annual report of the surgeons of several of the large camps:

Camp Gordon.—At this camp the cadre system of demobilization was used with three shifts of personnel working eight hours each. Complete plans and organization of demobilization group as organized in this camp and its methods of functioning are on file in the Office of The Adjutant General of the Army. The physical-examination section of this group was very efficient. A total of 1,500 examinations a day could be maintained indefinitely, each man receiving a thorough examination, his complete medical history obtained and recorded, and the result filed. If a man was found physically unfit for discharge, he was immediately hospitalized until maximum improvement was obtained, when he again passed through the "mill." If physically disabled permanently his case was reviewed by the review board of medical officers and then submitted to the disability board. Forty-eight hours was the maximum time allowance for discharge.

Camp Jackson.—The demobilization was rapid, the time from arrival in camp to final discharge being between three and seven days. Practically the entire 30th and 81st Divisions were demobilized at this camp, as well as various other organizations.

Camp Upton.—The camp up to September 25, 1919, was a debarkation camp and one of its principal functions was demobilization. The method was as follows: Troops disembarking from troop trains immediately upon arrival camp, regardless of the hour, were marched to a booth erected for the purpose where sandwiches and coffee were distributed and where a medical officer inspected for sickness and contagious disease. They were then marched to the receiving station, those troops which required delousing going to a separate area and after the completion of the delousing process were marched to their new area. At the receiving station the men were stripped of all surplus Government property. The next step was the final physical examination. This was done in two large barrack buildings, especially arranged for the purpose, by a large board of medical specialists which was known as the "discharge examining board." This board was especially selected and functioned most effectively, the

final medical examination being made in great detail and with infinite care, not only to locate all abnormalities but to make the same of record. In fact these records were so complete and so well indexed that recently we were able to give duplicate reports to The Adjutant General's Office in a number of instances where the original record had been lost. The personnel of the board varied from time to time, but the general average during the height of demobilization was 50 medical officers and 100 enlisted men, and this board had a maximum capacity of 1,500 physical examinations per day. Many times this number per day was greatly exceeded, the board then being increased accordingly. Before leaving the building every man's paper was carefully gone over by what was known as a "team captain" and should the man claim a disability which was not found, or should a disability be recorded which would necessitate an allotment of more than 10 per cent disability, or should there be any omissions or discrepancies in the report or anything at all peculiar about the case, the "team captain" referred the man to the board of review. The review board functioned in a separate part of an additional building and constituted a sort of court of last resort. In this same building were the representatives of the Federal Vocational Board. Upon completion of the physical examination the men returned to their barracks and later had their lectures on insurance, compensation, allotments, liberty loan, venereal disease, etc. Officers went through the same process, but prior to discharge were required to complete all records and to get a final clearance from the various departments. Casual officers, not attached to organizations, went through what was known as the "officers' discharge center." The last step in the demobilization was the final payment and entrainment. It was early discovered that discharged men in many cases remained about the camp and surrounding villages, and a system was therefore instituted to get them entrained and away promptly. This consisted in withholding the final pay until their train was ready, at which time they were marched to the pay table and immediately thereafter to the train. They were not given their discharge certificate until actually on board the train and thereafter were not permitted to leave the train. After the demobilization machinery was well established, men were discharged and out of camp under 48 hours from time of arrival.

Camp Pike.—The number of surgeons on duty at the demobilization group has varied widely; as many as 13 have been assigned at one time and even this number has been augmented by temporarily attaching surgeons from other parts of the command. This has been necessary in order to handle the greatly fluctuating tide of casuals. The work done by the board is believed to have been of a very satisfactory nature throughout.

Camp Funston.—It has been noticed that there is a tendency for enlisted men, probably through fear of being retained in the service, to hide their defects. This matter has frequently been discussed with members of the examining board and all have been impressed with the idea to record any and all defects that might possibly have some bearing on the soldier's physical condition, however slight. To further avoid soldiers being discharged who have not received a complete examination, any man who is admitted to hospital for further observation has placed on his Form 135–3 the word "void" written across the face of it, and there is sent with him at the same time to the discharge bureau a transfer card for his admission to hospital. Examinations of past reports will show a good per cent of defects found that were not claimed by the soldier.

Camp Dix.—The method of the physical examination of the troops upon demobilization is set forth as follows: The man is stripped and, after having his clothing checked is given a record card and he is then sent to the examiners of the sections as shown on the card: First, to the heart and lungs; then neuro-psychiatric; nose, throat, and ear; genito-urinary; surgical; orthopedic; and eyes, in their order. If no disability is found, his Form 135–3 is taken, to be later sent to the mustering office. When a disability is found a nominal percentage of disability is given by the examiner of that section finding the disability, and the man is then sent to the board of review, which reexamines the case and either allows the percentage of disability given by the examining board or increases or decreases the award given. If the disability is of such a character as to warrant further treatment the man is then sent to the hospital for further treatment; and when maximum improvement has been reached he is referred back to the board of review, which again reexamines him, and if satisfactory to the board he is cleared and discharged. All active venereal cases are sent to the hospital for treatment and none are permitted to be discharged until three negative smears have been received, or all open lesions have been healed. Active lung and mental cases are always referred to the hospital for observation and treatment, and in many instances are disposed of from the hospital, either by transfer to other institutions or discharged on certificate of disability. Nerve injuries are thoroughly tested out for reaction of degeneration, loss of function, etc. The eyesight of every man is tested for distance and all cases below the normal are referred to the dark room for special ex-

amination. Nose and throat cases are examined by reflected light, and all ears are otoscoped. Each examiner, when he has completed his part of the examination, puts his initials on the line showing his section, so that should any question arise in the future relative to the examination the matter can be referred to the officer concerned. The results of the physical examination show clearly the wonderfully beneficial effects of Army training on the majority of men examined, and that in the main the men are returned to civil life in much better physical condition than they were when drafted into the service. A very noticeable condition is the large number of men who were taken into the Army with minor defects which have been corrected while in the service.

An interesting fact brought out in demobilization work is that not a small percentage of cases, both officers and men, simulated disability in order to get all possible benefits from the Government before they were discharged from the service; and it was only by constant care and watchfulness that the Government's interests were safeguarded in this regard.

Camp Devens.—On checking the figures it is seen that of the 19,000 having a disability recorded on discharge only 10,000 claimed disability prior to examination. This may be explained in part by the soldier's anxiety to be discharged and his fear that his discharge might be delayed if he claimed disability. It is seen, therefore, that nearly one-half having disability either were unaware of the fact or wished to conceal it. Of those claiming a disability, the claims of one-third could not be substantiated by the examiners. This is explained in part by the fact that many claimed symptoms due to gassing. As the gassing claimed occurred several months previously, it is obvious that in many cases no bronchitis or other symptoms were found, on this late examination, to confirm the soldier's claim.

Camp Taylor.—The results obtained by this board in its working are believed to be excellent. There should be, however, a dark room equipped for use by the eye, ear, nose, and throat specialist for the examination of special referred cases. It is believed this is the only recommendation to be made for increasing the efficiency of the board as it carried on its work at this station. The work of the medical section of the demobilization group in relation to the other units was very satisfactory. The entire group was well coordinated and the different departments well arranged. It is difficult to make any suggestions as to the improvement of the system. * * * There were two disability boards, one at the base hospital and the other in the camp. The base hospital disability board operated in connection with the convalescent center. All men rejected on their arrival in camp by the physical examination board were either sent to the hospital or the convalescent center. If they presented disabilities which warranted their discharge on certificate of disability for discharge and they did not require hospitalization, they were examined by the base hospital disability board and sent to the convalescent center to await discharge. The camp disability boards acted only on those cases arising in units other than the convalescent center and only on those cases not on sick report or in the base hospital. The general results obtained were excellent, but the average length of time required to discharge a man on certificate of disability, 11 days, could have been materially shortened by the more rapid handling of the Forms 17, A. G. O., in the offices through which the form passed.

Camp Dodge.—The demobilization at Camp Dodge began on November 22, 1918, and officially closed November 25, 1919. During this period 208,827 were physically examined, 206,599 were reported to demobilization headquarters as available for discharge, and 2,229 were sent to the base hospital for treatment of acute disorders, venereal diseases, tuberculosis, and many miscellaneous causes. Of these 88 were active tuberculosis and 173 venereal disease. The miscellaneous troubles included defective hearing, errors of vision, exanthemata, acute bronchitis, deficiency of teeth, in short, any disorder arising in line of duty, and for which there was any likelihood of remedial measures being instituted. The low percentage of active tuberculosis and venereal disease is accounted for the by fact that these officers and men had been subjected to repeated inspections and examinations, so upon arriving at a station located so far from points of debarkation, the obvious cases did not arrive here. * * *

The ever present desire of the soldier to expedite his separation from the service, led him in many instances, to withold information from the examiners, and no doubt some were discharged who could have been improved by a term in the hospital. * * *

The rapidity with which the examiners were forced to work has been given as a cause for many mistakes being made, but more often the soldier himself could have obviated this trouble by making a plain statement of fact in his individual case. For the most part the examinations were conducted rapidly, but always in order, and with the welfare of the officer and man in view, and this medical examining board was always ready to do more than it was called upon to perform.

During the month of May, 1919, 24,066 men and officers were examined prior to discharge from the service. Of this number, 244 men and 1 officer claimed disability

which was not confirmed by the board of review, and in 1 officer and 1,232 men a disability was found, but in which no claim had been made, while 433 were referred to the base hospital on account of acute disease, contagious, in line of duty conditions, etc.

Camp Grant.—A medical board was organized at Camp Grant, Ill., November 24, 1917. Its duties were to examine men inducted into the military service. This board continued its function until November, 1918, when it became known as the medical examining board for the demobilization of troops. As necessity arose, the board was augmented in personnel and divided into four teams. Each team was composed of medical officers representing every essential branch of medicine. A dental officer was assigned to each team. The medical examining board was so organized that it was prepared to examine 1,500 to 2,000 men daily, and when occasion arose, more men up to 2,200 and 2,500 could be handled daily. There was in addition an auxiliary board known as the board of review. To this board were referred the cases with disability of those having claims for disability. The board of review utilized the services of specialists. The following examinations were made by the medical examining board at this camp during 1919:

Examinations made prior to separation from the service:

Officers	7,146
Enlisted men	229,277

Camp Lewis.—At the date of the armistice, November 11, 1918, a board of medical officers, charged with the duty of making physical examinations of men inducted into the service was functioning. This board was well organized and had all the necessary special examiners, so it was a comparatively simple matter to make slight changes in the organization to enable the board to function under the requirements of paragraph 22, Circular 73, War Department, 1918. The entire board was reorganized as one examining team, on account of the arrangement of the building in which the examinations were held (a converted barrack building).

The converted barrack building in use as an examining room was subdivided by the necessary partitions and railings to make it convenient to handle men in large numbers without confusion or delay. It contained an X-ray equipment which greatly facilitated the work, obviating the delay which would have been necessary had such work been performed at the base hospital. The one great objection to this building was the unavoidable noise when numbers of men were passing through. It was at all times difficult for the cardio-vascular and tuberculosis examiners to work, on this account, even after small rooms had been partitioned off for the individual examiners, in an effort to exclude external sounds. The building was also very difficult to keep clean, with hundreds of men tracking in mud and dirt every day. For future handling of large numbers of men it would be very desirable to construct a suitable building for physical examination purposes.

CERTIFICATE OF DISABILITIES.

As previously stated, no accurate records are available at present of the number of men discharged by certificate of disability boards during the year. Reports were not called for until February, 1919, and since that date not all camps and hospitals have rendered them according to instructions. However, records are on file of the discharge of 19,750 men by disability boards from February, 1919, to December 31, 1919. The following table gives the classification of disabilities found:

Classification.	Number of disabilities.	Percentage, by groups.
Orthopedic, including bones and joints	4,671	23.6
Neuro-psychiatric	3,077	15.6
Respiratory	2,877	14.5
General surgery and skin	2,539	12.8
Cardio-vascular	1,411	7.1
Ophthalmological	613	3.1
Oto-laryngological	601	3.0
Venereal	258	1.3
Miscellaneous, including dental	3,703	18.7
Total	19,750	99.7

Of the 3,154,676 examined by both demobilization and disability boards of whom this office has record, 185,839, or 5.91 per cent, were reported with 10 per cent or more disability. It is believed that when complete reports are obtained of those discharged by disability boards this figure will be higher than that given above. No data are at present available showing the percentage of reportable disabilities which originated in the military service. Such can only be obtained by a comparison between the physical records upon entrance and upon discharge of approximately 4,000,000 men. These records are on file in The Adjutant General's Office.

The following table gives the classification of the total number of disabilities reported among 2,282,682 men examined by both demobilization and disability boards for a period of 11 months:

Classification.	Number of disabilities.	Percentage, by groups.
Orthopedic	22,246	24.25
General surgical and skin	18,832	20.54
Neuro-psychiatric	8,909	9.71
Respiratory	8,184	8.92
Ophthalmological	5,877	6.41
Oto-laryngological	5,657	6.17
Cardio-vascular	5,397	5.88
Venereal	1,500	1.63
Miscellaneous, including dental	15,123	16.49
Total	91,725	100.00

PHYSICAL EXAMINATION FOR VOLUNTARY ENLISTMENT.

RECRUITING.

The physical examination of applicants for enlistment.—Recruiting for the Regular Army was resumed March, 1919, and continued throughout the rest of the year with a vigor heretofore unequaled. The strength of the Army has been a variable figure, being dependent upon the rate of demobilization and the extent to which losses were offset by new enlistments. The maximum enlisted strength permitted under appropriations for the year 1919 was approximately 278,000, exclusive of the Philippine Scouts (12,000) and the United States Military Academy detachment (516). The strength of the various arms, corps, and departments was based upon the actual numbers authorized under the national defense act, the act of Congress of July 11, 1919, and War Department orders based thereon.

Methods of recruiting.—The methods employed were much the same as those in vogue during prewar times, except that they were pursued much more vigorously. The country was divided into recruiting districts; general recruiting stations were established in the cities and designated as district headquarters; substations were located in the various cities and towns therein. The general recruiting stations, as heretofore, were commanded by line officers who were charged with making the preliminary physical examination of applicants and sending those accepted to designated points, usually recruit depots or recruit depot posts, for final physical examination and enlistment by medical officers. Applicants at recruiting stations were permitted to select the station at which they were to serve, and under this

policy a considerable number were sent from the recruiting station direct to a camp or post for medical examination and enlistment, not going to a recruit depot at all.

At the recruit depots the prewar practice of having the applicants actually enlisted by a medical officer continued in vogue. At most other stations, however, a line officer was appointed "recruiting officer" and he accomplished the enlistment after the applicant had been pronounced physically sound by the examining board or examining surgeon.

During the period from March 1, 1919, to December 31, 1919, a total of 176,264 men applied for enlistment at general recruiting stations. Of this number, 88,612, or 50.2 per cent, were rejected, and 87,652, or 49.8 per cent, were accepted and forwarded to recruit depots. Of the number of applicants who reached recruit depots approximately 80 per cent were enlisted, 17 per cent rejected, and 3 per cent either secretly left the depots or declined to enlist. Thus, out of a total of 176,264 men applying for enlistment only approximately 70,000, or 39 per cent, became soldiers. In view of the present liberality of our physical requirements, these figures are not complimentary to the physical vigor of the class of men applying for enlistment.

The rejection at recruit depots of such a large number of accepted applicants is an item of great expense. That the number of rejections at recruit depots is large is not surprising, however, when one considers that the preliminary physical examination is made by line officers who possess no medical training. The wonder is that the percentage of rejections is not higher.

The present physical standards, Special Regulations No. 65, November 8, 1919, modified by letters, Adjutant General's Office, No. 341.41, dated March 6, 1919, and January 19, 1920, are written in technical language and intended for use by medical officers only. For the major part of the year these were the only instructions extant concerning physical requirements. Realizing the difficulty under which line officers were laboring with such a technical set of standards as a guide, the Surgeon General, upon request of The Adjutant General, prepared a set of instructions bearing on the physical examination of applicants for enlistment and adapted for the use of line officers. The pamphlet was written in plain, nontechnical language and not only described the method of making a physical examination but also listed all physical causes for rejection which an officer without medical training could reasonably be expected to detect. These instructions were issued by The Adjutant General's Office on December 26, 1919, as a supplement to Special Regulations No. 65.

Almost immediately upon resumption of recruiting, illiteracy was removed as a bar to enlistment. This made it necessary to devise some method whereby line recruiting officers could form an estimate of the mental caliber of illiterate and non-English speaking applicants for enlistment. Upon request of The Adjutant General, the section of psychology in the Surgeon General's office prepared a simple test known as the "Recruit psychological examination." This test was so devised that its conduct required no spoken or written words on the part of either the examiner or the applicant, signs being used exclusively. The directions for this examination were printed and distributed to all recruiting stations. An officer of the Sanitary

Corps from the section of psychology visited the principal recruiting stations for the purpose of demonstrating the test and of putting it in operation. Unfortunately, no provisions were made whereby data could be secured regarding the results obtained, hence this office can not report as to the merits of the procedure.

In addition to the activities of the general recruiting stations, an immense amount of local recruiting work has been done by individual arms of the service. Intense interest has been displayed and it is believed that every known legitimate method of securing men has been employed, so great has been the desire of the various branches to complete their authorized strength. A considerable percentage of both commissioned and enlisted personnel of the Army has been on this duty during the year and recruiting parties have been sent out from practically every military station of the United States. In many instances they were accompanied by a medical officer detailed to make the physical examination. Complete reports of the number of men secured in this manner are not on file in this office; however, there is record of 48,255 applicants for enlistment at military posts other than recruiting stations and recruit depots from March 1, 1919, to December 31, 1919. Of this number 44,873, or 93 per cent, were accepted and 3,375, or 7 per cent, were rejected. It will be noted that the percentage of rejection is much lower than at recruit depots during the same period (17.2 per cent). This is largely due to the number of reenlistments made at camps and posts and also, it is thought, to the fact that the examinations were less rigid than those conducted at recruit depots.

Physical standards.—The present standards of physical examination governing entrance into the Army are contained in Special Regulations No. 65, November 8, 1918, as modified by letters, Adjutant General's Office, No. 341.41, March 6, 1919, and January 19, 1920. Special Regulations No. 65 is a duplicate of Form 75, P. M. G. O., June 5, 1918, and being written to cover draft requirements contains standards governing special and limited service in addition to those governing general military service. Hence upon resumption of voluntary enlistments in March, 1919, this office recommended certain changes in the standards as set forth by Special Regulations No. 65. These changes were adopted and published as a supplement to Special Regulations No. 65 in the form of letter, Adjutant General's Office, No. 341.41, March 6, 1919. This letter will not be given in full in this report, since it is sufficient to say that it placed all applicants in two groups (1) those conforming to the standards for general military service and (2) those to be rejected for military service. The draft classifications "B" and "C," which consisted of "deferred remediable" and "special and limited service" cases, were all classed as unfit for military service. In The Adjutant General's letter of March 6 the following conditions were recited as causes for rejection in addition to those enumerated in Special Regulations No. 65: All active venereal diseases, absence of both testicles, acute cystitis, large varicocele, large hydrocele, undescended testicle if lying in the inguinal canal, amputation of penis if interfering with micturition, sacroiliac disease, severe scar pain, fracture of the coccyx, hay fever, acute bronchitis, pleurisy with effusion, fracture of rib or ribs, malaria, hysterical paralysis or muscular spasm, acute primary sinusitis, aphonia, scabies, ringworm,

unless slight, and pediculosis, unless the means are at hand for immediate delousing. The letter, Adjutant General's Office, No. 341.41, of January 19, 1920, deleted paragraph 89 of Special Regulations No. 65 and left the decision as to whether an applicant was a moron to the judgment of the examiner, in place of fixing a minimum mental-age standard of eight years, above which an applicant must be unconditionally accepted.

A comparison between the present standards and those of the prewar period will show a lowering in the present requirements for height, weight, and chest measurements and for vision, while the dental requirements are higher than formerly. The minimum weight was formerly 120 pounds; it is now 110 pounds. The minimum height has been reduced from 64 inches to 60 inches, chest circumference at expiration from 32 inches to 30 inches. The minimum visual requirements for the line of the Army and Signal Corps were formerly 20/40 for the right eye and 20/100 for the left, without glasses. At present they are, for any branch of the service, 20/40 in one and 20/100 in the other eye, without glasses, or 20/100 in each eye if correctable with glasses to 20/40 in either eye. Color blindness, which formerly rejected for the Signal Corps, is now not a bar to enlistment in that branch. Prior to 1919 the minimum dental requirements were four double (bicuspid or molar) teeth, two above and two below, opposed to serve mastication. At present the requirements are six masticating (molar and bicuspid) and six incisor (incisor and cuspid) teeth, so opposed as to serve the purpose of incision and mastication.

Special Regulations No. 65, as modified by letter 341.41, Adjutant General's Office, March 6, 1919, is the most complete and comprehensive set of standards ever compiled for the Army. In addition to definitely stating each cause for rejection, a very excellent description of the interpretation of various physical signs is given. Medical officers who familiarize themselves with the contained text should have no difficulty in determining upon the fitness or unfitness of the applicant.

Methods of examination.—The methods employed at present differ quite materially from those of the past. Formerly applicants were generally examined by one medical officer, excepting at recruit depots, where usually one officer made the eye, ear, nose, and throat examination, and another the general examination. The method used at present was evolved from the draft and demobilization examinations, and consists in the examination being conducted by a medical board, consisting of specialists when practicable. At recruit depots and large camps a typical board is as follows: One general examiner, including surgery, orthopedic, skin, hernia, venereal diseases, etc.; one internist, including tuberculosis, cardio-vascular conditions, etc.; one eye, ear, nose, and throat examiner; one neuro-psychiatric examiner; one dental examiner. Such a board as the foregoing was recommended by this office and its organization and employment were directed wherever practicable in Circular 435, War Department, September 23, 1919. Of course at small stations the examination must usually be made by one officer.

At the large recruit depots, viz, Fort Slocum, Jefferson Barracks, and Columbus Barracks, complete boards, as given above, have been maintained. Owing to limited personnel it has not been practical

to keep a full board at the remaining recruit depots and depot posts at all times, but an effort has been made to have the following examiners always available, viz, one internist, one officer qualified in eye, ear, nose, and throat examination, and one neuro-psychiatrist. In the larger camps the demobilization examining boards were utilized in conducting physical examinations for enlistment until demobilization was complete, since which time as full a board as practicable has been maintained.

It is perhaps too early to voice an opinion as to the advantages of having examinations for voluntary enlistment made by a board of specialists rather than by one examiner. This method of course is absolutely necessary when examining large numbers of men, as during draft and demobilization periods, and, theoretically at least, it should be superior even for a comparatively small number of examinations.

Recruit depots.—The following military stations functioned as recruit depots during the past year: Fort Slocum, N. Y.; Jefferson Barracks, Mo.; Columbus Barracks, Ohio; Fort Thomas, Ky.; Fort Logan, Colo.; and Fort McDowell, Calif. Camp Travis, Tex., and Fort Oglethorpe, Ga., were designated as recruit depot posts, performing work identical with that of recruit depots. A total of 83,742 applicants were examined at recruit depots from March 1, 1919, to June 30, 1920. Of this number, 63,606 or 75 per cent were examined at the three principal depots—Fort Slocum, Jefferson Barracks, and Columbus Barracks.

The following extracts from the annual reports of the surgeons of recruit depots and recruit depot posts are given:

Fort Oglethorpe.—The applicants received at this post are of a low standard both physically and mentally. A large percentage have hookworm or malaria, and venereal disease is the leading cause for rejection. Under classification of "illiterates" recruiting officers accept many anomalies, such as morons, those who apparently have always been the prey of their community for amusement owing to their mental deficiency, those of feminine nature who immediately become the butt of their fellow recruits, etc. It is the opinion of the surgeon that accepting officers should investigate more fully this class of applicants, since they have greater opportunity to gain information as to whether the men have ever been effective in civil life.

The efficiency of tests prescribed for use at recruit stations and recruit depot posts to determine the presence or absence of mental deficiency appear to allow the acceptance of applicants who will not make good soldiers. In addition to these tests of squares and angles, counting blocks, picking out left-out symbols in picture cards, this office suggests that the applicants be asked questions that apply to affairs of everyday life, that will demonstrate their powers of judgment, keenness of perception, and apprehension.

It is our opinion that the methods of examining recruits could be raised in efficiency, still as it stands to-day we believe that the present methods surpass those used before the draft.

Fort McDowell.—The general character of applicants received is about the same as that of the men who composed the National Army. Pyschological test by expert at this depot compares very favorably with the average of those taken during the draft period. Physically also they average about the same.

It is the opinion of the recruiting officer that many applicants are accepted and sent to this depot for enlistment with physical defects which should have been detected at place of acceptance. A compilation of the causes of rejections for December shows 45 per cent of the total rejections were for defects which should have been detected at place of acceptance.

The acceptance of youths below required age or with insufficient evidence as prescribed in Circular 227 is a frequent cause for unnecessary expense to the Government. These men have to be held from one to three weeks while we get into communication with their relatives. In many instances they are taken before probation officers at place of acceptance, who are made their guardians ad litem. When they arrived here we find many of this class have parents living and we must hold them at Government

expense until we obtain the necessary information of their age. In a large proportion of this class we find them under 18 years and reject them at a loss to the Government for their transportation and maintenance.

It is the opinion of the recruiting officer that the present system of examining by a board is preferable to the former method. The service of a psychologist at this depot seems to be unnecessary to the recruiting officer for the following reasons:

(*a*) Any medical officer sufficiently competent to be a neuropsychiatric expert should be able to easily detect mental deficiencies among the applicants. This was satisfactorily done at this depot before the detail of a psychologist.

(*b*) The result of the psychological examination indorsed on the service record of the recruit consists only of the mental standing and it is not seen how this can be useful information to the man's company commander unless he be familiar with the system used. No indorsement is made as to the man's fitness for any particular work in his organization which would really be of use in assigning him to his duties when assigned. If the psychological ratings are to function to the fullest extent the line officers should be instructed as to their meaning and use; also these ratings should be made on practically all enlisted men in the service.

Fort Slocum.—The present method of recruiting should, in my opinion, give way to direct recruiting for each regiment or smaller unit by an officer belonging thereto, accompanied by a surgeon to examine on the spot and send the accepted men direct to the organization of which they are to form a part.

The experience here bears out the statement made on pages 20–21 of the War Department publication, "The War with Germany," regarding physical inferiority of recruits from this section of the United States.

In my opinion some applicants came here with physical defects that should not have escaped the recruiting officer.

The present method of examination leaves nothing to be desired.

Columbus Barracks.—The post itself is in the center of the city and is exposed to all the evils of such close contact. Moreover it is a city in which clandestine prostitution is widespread, due to the efforts of reformers in closing all houses of prostitution. The recruits are lectured daily on venereal subjects. Pictures showing results of venereal disease are shown to them. Moving pictures from the War Department bearing on the venereal evil have been exhibited and great care has been taken with the prophylactic station.

Summary: As a whole we are getting younger and more immature men into the service; this may not be a marked disadvantage for a 3-year-enlistment, where an immature youth is given an opportunity to develop and yet serve the Government, but for the 1-year enlistments, while the training and development secured by the men will undoubtedly benefit them individually, yet the value of their service to the Government for the 12-month period is questionable in my opinion. It must be borne in mind that it is the boy with immature strength who, when placed under field conditions, suffers most from fatigue, which will lower his resistance to infection and result in a marked influx to the hospital.

The recruits enlisted here now compare favorably with the men comprising the Army before the war.

The present method of examination by a group of medical examiners who are specialists is much better than the old method used. These specialists should include an eye, ear, nose, and throat specialist, a psychiatrist, an internist, and a laboratory specialist (X-ray included), the work of all to be supervised by a senior officer of clinical experience who is responsible for results obtained. For the larger recruit depots better arrangements should be made for recruit examination. Thus at this post facilities available are inadequate. The recruiting department of the hospital, built about eight years ago, is able to care for about 30 recruits a day; twice that number and sometimes thrice, are passing through daily, which results in crowding and confusion at times. Temporary shacks are available but are far from suitable, being difficult to heat in winter and very hot in summer, besides being dingy in appearance.

As recruiting is perhaps the single most important activity being carried on at these posts, it is thought permanent recruiting buildings should be built. This will speed up the work and insure better results. The increased size of the Army must also be borne in mind and the possibility of examinations for the service in case of universal training which might very well be carried on largely at recruit depots. As to the requirements for service the following from the psychiatrist at this post is submitted, which is heartily concurred in by the undersigned:

"The neuro-psychiatric examinations show that while the neurological and psychoneurosis examinations can be satisfactory made so that one feels reasonably sure that all of this type can be eliminated, the same can not be done in the mental exam-

ination. True psychotic states are fairly readily determined but in the cases of mental deficiency one is impressed with the idea that men are getting into service who from many angles are not desirable. This is not due to the character of examinations nor lack of opportunity to properly classify them, but to the extremely low standard set. Experience at this depot indicates that the recruit psychological examination, which allows of 20 points for a passing mark, is too low, for the reason that when checked up with a mental test by the Stanford revision of the Simon-Binet test, it corresponds with about 7½ years mental age. It is also noted that this test is not true proportionately with increasing mental age. Some of between 8 and 9 years will make a score of over 30 and some between 9 and 10 years of less than 30. The mental age of 8 years is also thought to be too low, judging from the general reaction of most of those applicants. One can not but feel that lack of opportunity is not the only reason for the low mental age and becomes more and more convinced, as the number of examinations accumulate, that lack of inclination, initiative, and ability is largely a factor and that such men are not desirable as soldiers. It would therefore seem advisable to raise the age to, at least, the 10-year level and to make the recruit psychological examination correspondingly more difficult."

Jefferson Barracks.—It is my opinion that the present methods employed in the physical examination of recruits at this depot are thorough and efficient. The general physical character of the present-day applicant is immature in quite a large number of cases. I believe that general recruiting officers should exercise special care in the following conditions relating to the examination of recruits: Age, marital status, epilepsy, drug addiction, mental deficiency, enuresis, and criminal records.

Fort Logan.—The opinion of those engaged in handling recruits at this depot is that in general the applicants received have been inferior in many respects to those brought in through the draft during the war; officers of previous experience do not believe they are as desirable as men who were enlisting prior to the war. From about November 1, 1919, there was noticeable improvement in this respect and it is believed that the number of substandard recruits was not greater than should be expected. One is impressed by the large percentage of men recruited in this region, aged from 18 to 21, who quit school at the average age of 14 and who have lost much of the education thus attained.

The medical examiners believe that obvious disqualifying defects in applicants are overlooked through carelessness on the part of the recruiting officers at general recruiting stations; those noted are hernia, large hydrocele, large varicocele, atrophied testicles, defective vision and hearing, reformatory and jail sentences, and mental deficiency. However, scrutiny of the records does not show that the number rejected for the above causes is excessive when compared with other causes. It depends largely upon the personal equation of the recruiting officer. Thus the Denver office is the best in our district, while several offices do not show a great degree of efficiency.

The present intense, although necessary and proper, recruiting campaign, with its widespread propaganda of Army advantages and educational opportunities, is bringing many men into the service who regard the actual life and duties of a soldier as a secondary consideration; these men constitute a disastisfied class when they find that their hopes of an immediate and easy vocational training are not fulfilled.

The method of making physical examinations by boards whose members are specialists is superior to that practiced before the draft, but is bound to result in a higher percentage of rejections because of the discovery of defects which a single examiner would overlook. I think the two most important specialists on the board are the neuro-psychiatrist and the medical officer qualified in diseases of the eye, ear, nose, and throat. The rest of the field can be covered adequately by other medical officers, if specialists are not available.

Camp Travis.—The average general character of the applicants appearing for enlistment is below standard physically, mentally, and, from such short observation, I believe, morally; however, this does not hold good as a universal rule, for many excellent men are enlisting. The largest per cent, however, are of the unconcerned, roaming type, or young men who are away from relatives and out of civil employment.

While the Motor Transport Corps was open, with its promise of educational advantages, many excellent men entered that branch. The number of men with prior service during the war, who are good men vocationally, is few. In fact, it is surprising the small number of men of this class that are measuring up to the average of recruits without prior service. Most of the recruits are between 18 and 21 years of age, and this office has experienced considerable trouble and difficulty with men below 18 years claiming they were 21 years. Many such cases have come up and by statement and affidavit they have claimed the recruiting enlisted man told them to maintain they were 21.

The general recruiting stations are eliminating the physically unfit men as well as could be expected. Frankly, it seems that medical officers should be detailed to each general station or assigned to this work, for it would not only save the Government thousands of dollars in rejected men, but would increase the enlistments considerably by increasing the acceptances. I personally know of many men who have been rejected physically for acceptance at the general stations who were shortly afterwards enlisted here. The defects thought to exist were not disqualifying.

The examinations by boards should be the very best method; unfortunately, at this camp the board was not a board except on paper, as the respective members had so many other duties that only one or two members were present and they would have to examine in branches other than their specialty, which was not the intention of the order and gave ample opportunities for errors and oversights.

Fort Thomas.—The general character of recruits compared with those enlisted in prewar times has been poor; a large number of young men under 21 have been sent for examination, many of whom are poorly developed but nevertheless come within the physical and mental requirements, or for whom a waiver has been obtained.

The physically unfit are eliminated by the recruiting officers and the recruiting stations as thoroughly as could be expected. The intense desire on the part of recruiting officers to obtain men, however, has had a tendency to interfere with their better judgment.

The present board system is far superior to methods in vogue before the World War. The members of the board should, however, be carefully selected if possible from those medical officers who have had service with troops. The board itself should be conducted by a medical officer of experience and mature judgment who has had long service with combat troops under field conditions.

Résumé of recruit depot reports.—From the above extracts it is seen that there is common agreement on several important matters, viz: (1) That the class of men now applying for enlistment is inferior physically and mentally to that of prewar times; (2) that the reason for this physical inferiority is largely the immaturity of the applicants, the age limit having been lowered to 18 years and consent of parent or guardian no longer being necessary; (3) that line recruiting officers at general recruiting stations do not use sufficient care in determining the authenticity of birth certificates and other evidence offered by applicants as proof of their legal age; (4) that the present method of examination by medical boards is superior to the one formerly in use. This office subscribes to all of the above opinions except the fourth, in regard to which it is believed that sufficient data have not yet been secured to make reliable comparison. In addition, the surgeons at Fort McDowell, Columbus Barracks, Jefferson Barracks, and Fort Oglethorpe are of the opinion that the recruit psychological test in its present form is of doubtful value in eliminating illiterates who are mentally unfit; upon this opinion no comment is made by this office. The surgeons of the following depots, viz, Fort Slocum, Fort Logan, Fort Oglethorpe, Fort McDowell, and Jefferson Barracks, express the opinion that many applicants who are accepted at general recruiting stations and rejected at recruit depots for defects, possess these defects in such degree that they should have been obvious to line recruiting officers at the stations. Practically all depots are unanimous in the opinion that medical officers should be stationed at general recruiting stations.

The following figures are illustrative of the work done at recruit depots from March 1, 1919, to June 30, 1920. The recruit depot posts, Camp Travis and Fort Oglethorpe, are omitted for lack of data concerning them. During the period 3,121 applicants declined to enlist.

Depot.	Number examined.	Number enlisted.	Number rejected.	Per cent rejected among total examined.
Fort Slocum	25,924	17,324	6,759	26.08
Jefferson Barracks	18,114	15,765	2,280	12.58
Columbus Barracks	19,568	16,298	2,684	13.72
Fort McDowell	7,273	5,776	1,221	16.79
Fort Logan	7,310	5,967	1,040	14.23
Fort Thomas	5,553	4,510	997	17.95
Total	83,742	65,640	14,981	17.89

It will be noted that a wide discrepancy exists in the percentage of rejections at the various depots, especially the three principal ones—Fort Slocum, Jefferson Barracks, and Columbus Barracks. This office is unable to completely explain this variance. No doubt it is in part due to a difference in the general physique of the applicants, the ones received at Fort Slocum being inferior to those at Jefferson Barracks and Columbus Barracks. This view is borne out by the experiences of the recent draft. However, this does not wholly explain the situation. It is probable that a difference in the rigidness of the physical examinations given at these stations and in the interpretation of the findings has more bearing upon the divergent results obtained.

At these six recruit depots a summary of the various causes for rejection during the same period, based upon 83,742 examinations, is here given:

	Number rejected.	Per cent rejected among total examined.
Neuro-psychiatric	3,614	4.31
Cardio-vascular	1,487	1.77
Oto-laryngological	1,384	1.65
Venereal	874	1.04
Respiratory	969	1.16
General surgical and skin	732	.87
Orthopedic	712	.85
Ophthalmological	671	.80
Dental	302	.36
Developmental	311	.37
Miscellaneous physical causes	780	.93
Under age	1,173	1.40
Causes other than physical	1,972	2.35
Total	14,981	17.89

It will be observed that rejection from ophthalmological defects and developmental conditions (deficient height, weight, and chest measurement) are very low, due no doubt to lowering of standards and to the ease with which these determinations can be made by the line officer at the recruiting station. The percentage of dental defects is also low, though here the requirements are higher than formerly. The large number of neuro-psychiatric rejections is probably due to the increased number of mental defectives who are now applying for enlistment and the great care used by the neuro-psychiatrists to eliminate them.

A summary of the causes for rejections among applicants for enlistment at military stations other than recruit depots for the period from March 1, 1919, to June 30, 1920, based upon a total of 82,325 men examined, is as follows:

	Number rejected.	Per cent rejected among total examined.
Developmental	1,027	1.25
Ophthalmological	792	.96
General surgical and skin	745	.91
Orthopedic	652	.79
Cardio-vascular	810	.98
Neuro-psychiatric	732	.89
Dental	381	.46
Venereal	388	.47
Otolaryngological	486	.59
Respiratory	295	.36
Miscellaneous physical causes	456	.55
Under age	234	.28
Causes other than physical	387	.47
Total	7,385	8.97

Out of the 82,325 men examined 74,889 were accepted, 7,385 rejected, and 51 declined to enlist. In the above table we find almost the exact reverse from results at recruit depots. The rejections for developmental and ophthalmological defects, which were almost negligible at recruit depots, were the highest at camps and other stations, while the neuro-psychiatric and cardio-vascular defects, which predominated at recruit depots, are among the lowest at camps and posts. The same holds true of otolaryngological, venereal, and orthopedic defects.

Prewar statistics.—The Adjutant General's reports from 1909 to 1915, inclusive, show that 83 per cent of all applicants at general recruiting stations were rejected. The same report from March, 1919, to December 31, 1919, shows that 50 per cent were rejected. This discrepancy may be at least partly explained by the lowering in height, weight, and visual requirements and the reduction in the limit of applicants from 21 years to 18 years. During the period 1909–1915, 14.71 per cent of applicants were rejected at recruit depots, while from March 1, 1919, to June 30, 1920, the rate of rejection was 17.89 per cent. The percentage of rejections for the entire Army, exclusive of general recruiting stations, for the period 1909–1915, inclusive, was 11.8, while for the period from March 1, 1919, to June 30, 1920, it was 13.4.

RESERVE OFFICERS' TRAINING CORPS AND PHYSICAL STANDARDS FOR SAME.

PHYSICAL REQUIREMENTS.

The Reserve Officers' Training Corps was organized under authority of act of Congress, June 3, 1916, as amended by the acts of Congress of September 8, 1916, and July 9, 1918, the object being to provide systematic military training at civil educational institutions for the purpose of qualifying selected students for duty as reserve officers in the military forces of the United States. In accordance with

subparagraph B, paragraph 24, Special Regulations No. 44, 1919, the physical examination of candidates is ordinarily conducted by civilian physicians, but in institutions having 250 or more candidates for original commission, medical officers of the Army, if available, may be detailed for the purpose of conducting the examination.

Examinations of candidates commenced in October, 1919, and from that date until December 31, 1919, approximately 100,000 men were examined. Of this number 9,992, or approximately 10 per cent, were examined by medical officers and the remainder by civilian physicians. As this office received no reports from the civilian examiners, any data given must necessarily be incomplete. The records of the examinations of 9,992 candidates by medical officers show 9,267, or 83.4 per cent, were accepted, and 1,519, or 15.19 per cent, rejected. As will be noted, the rate of rejections is not greatly below that of the recruit depots of the Army (17.89 per cent). This fact is interesting, as some might expect a lesser per cent of physical defects among the class of youths attending schools and colleges than among types applying for enlistment in the Regular Army.

Candidates for the Reserve Officers' Training Corps are divided into three classes: (1) Students between the ages of 14 and 20 years, inclusive, who are candidates for Reserve Officers' Training Corps units at schools, colleges, and universities, etc.; (2) members of Reserve Officer's Training Corps units reporting at summer camps; (3) graduates of Reserve Officers' Training corps units who are applicants for commission in the Officers' Reserve Corps, United States Army.

From the above it will be seen that these candidates range in ages from 14 years to 21 years and above, and hence could not be governed by the physical standards for the Army as set forth in Special Regulations No. 65 and amendments, which are intended for applicants of a minimum age of 18 years. Accordingly, upon request of the General Staff, physical standards were prepared in this office and published in Special Regulations No. 65 (b). The requirements are the same in general as those outlined for enlisted military service, with the exception that the minimum height, weight, and chest measurements are lowered as follows:

Age.	Height.	Weight.	Chest (expiration).	Mobility.
	Inches.	*Pounds.*	*Inches.*	*Inches.*
14 years	58	85	27	2
15 years	59	95	27	2
16 years	59	100	28	2
17 years	60	105	29	2
18 years	60	110	30	2

Although very little data were available upon which to base the height, weight, and chest requirements for youths of from 14 to 18 years, nevertheless it was thought that the above minimum requirements were sufficiently liberal and would not exclude any except those obviously unfit by reason of insufficient development. Meager reports, however, from several institutions and a further study of the situation indicate that these standards may require downward

revision in some respects. In order to obtain more extensive information on this subject and also to secure data relative to the physical advantage to be derived from military training, this office recommended that a form be adopted for use in conducting examinations for entrance into the Reserve Officers' Training Corps. This form, which has been authorized by The Adjutant General, is to be filled out at the initial examination and also at each subsequent reexamination undergone by the individual. In other words, the form will be completed at the candidate's original examination, again when he reports at the summer training camp, and, finally, in the case of successful candidates, when he is examined for commission in the Reserve Officers' Training Corps at the end of his college course. It will be rendered by both civilian physicians and medical officers. Thus it will be possible to note average heights, weights, etc., for certain ages, increase in weight, etc., with advancing age, and improvement or lessening of existing physical defects. The compiled data from thousands of these forms should be of immense value.

CAUSES OF REJECTION.

The following table gives the causes of rejections among those applicants for the Reserve Officers' Training Corps examined by medical officers during October, November, and December, 1919, the total number examined being 9,992:

	Number rejected.	Percentage rejected of total examined.
Developmental, including deficiencies in height, weight, and chest measurement	483	4.84
Cardio-vascular	316	3.16
Ophthalmological	252	2.52
General surgical and skin	198	1.98
Orthopedic	159	1.59
Otolaryngological	35	.35
Dental	35	.35
Respiratory	20	.20
Neuro-psychiatric	17	.17
Venereal	4	.04

The above report shows the greatest number of rejections to have been from developmental causes, and these were chiefly underweight. It is known that the heads of the various schools, colleges, and universities are desirous of having the present weight requirements lowered in order that a large number of students may receive the benefit of military training. However, until further data are accumulated upon the subject it appears inadvisable to reduce the weight requirements on account of the expense incurred in training men who in the end probably would not be physically fit for a commission in the Reserve Officers' Training Corps.

Sanitary Engineering Section.

During the year the activities of this section have materially decreased and since March 1, 1920, only one officer has been on duty in this office. Four other sanitary engineers of the Sanitary Corps

remain in the service, being stationed at Camps Eustis, Dix, and Benning, and at Kelly Field, where their duties are mainly confined to antimosquito procedures. The work of the section has in general covered the supervision of the matters specified by War Department orders as pertaining to the duties of the sanitary engineer. Somewhat in addition to these activities the sanitary engineering section has carried out the following lines of work:

(*a*) Preparation of the history of malaria control during the war, including about 70 individual station histories and a summary, bringing together all available data on mosquito-control work in the United States, Alaska, Porto Rico, Canal Zone, and among the troops in the American Expeditionary Forces.

(*b*) A complete survey of the water supplies of all military stations, systematizing the tabulation of water analyses in such a way as to effect a better check on the many supplies.

(*c*) Directing and instigating special sewage disposal experiments on the typical sewage disposal plant at Camp Dix. The results of these experiments should be of benefit in supervising the operation of all similar plants, of which there are many.

(*d*) Arranging and participating in a preliminary test of the garbage and refuse disposal plant at Fort McHenry, with a view to ascertaining its efficiency and limitations. This test was made jointly by the Medical Department and the engineering section of the Construction Division.

(*e*) Arranging and taking part in a preliminary test of burning manure in the forced-draft incinerator at Camp Humphreys. This test was made jointly by the Medical Department and the engineering section of the Construction Division.

(*f*) Preparation of a publication entitled "Interpretation of Water Analyses."

During May and June the officer on duty in this office inspected most of the southern stations where malaria might be a considerable factor with a view to determining the necessities for mosquito-control work during the coming year. The results of this inspection have already been discussed.

Section of Food and Nutrition.

The activities of the section since July 1, 1919, have been mainly along two lines, preparation of a history of the section for the "Medical and Surgical History of the War," and attention to food and nutrition affairs in military hospitals. In the latter connection, inspection of the mess conditions in the hospitals in the eastern section of the country have been made from this office as follows:

General Hospital No. 2, Fort McHenry, Md., August 6, 1919.
General Hospital No. 8, Otisville, N. Y. August 21, 1919.
General Hospital No. 31, Carlisle, Pa., August 19, 1919.
General Hospital No. 42, Spartanburg, S. C., August 29, 1919.
General Hospital No. 43, Hampton, Va., August 28, 1919.
Walter Reed General Hospital, Takoma Park, D. C., November 25, 1919.
General Hospital No. 2, Fort McHenry, Md., December 3, 1919.
General Hospital No. 41, Fox Hills, N. Y., December 5, 1919.
General Hospital No. 31, Carlisle, Pa., December 9, 1919.
General Hospital No. 43, Hampton, Va., December 11, 1919.
General Hospital No. 28, Fort Sheridan, Ill., December 18, 1919.
General Hospital No. 6, Fort McPherson, Ga., January 8, 1920.
General Hospital No. 19, Oteen, N. C., January 10, 1920.

The specific conditions found in these institutions are shown in the reports of the inspections. One situation that was common to all the hospitals to a greater or less extent was a demoralization in mess organization, and consequent injurious effect on the preparation and service of food, owing to discharge of experienced personnel of the emergency forces. The conditions resulting from these cir-

cumstances and from the difficulty in obtaining the kinds and quantities of foods required for feeding the hospital population on the ration allowance were compelling unusual care and attention on the part of the hospital officials to prevent dissatisfaction within and criticism from without the institutions. As a result of increases in the ration allowance for patients and the employment of civilian cooks these difficulties have been successfully overcome.

On February 15, 1920, the last officer of the Sanitary Corps connected with this section was discharged from the service and the section of food and nutrition ceased to exist after having functioned as a division or a section since October 16, 1917.

Miscellaneous Section.

The activity of this section very materially diminished during the year and ultimately the section was merged with that of physical examinations. The bulk of the work has had to do with the handling of papers relating to individual cases, such as transfers of a soldier from one hospital to another, waivers of physical defects for recruits, action on recommendation for discharge from service of temporary officers and enlisted men undergoing treatment in hospital, etc. Many minor letters of complaint also are answered, the more important ones, however, being handled by the Chief of the Division of Sanitation or by the Surgeon General himself. Other duties devolving upon the section have consisted of the preparing certain chapters for the "Medical and Surgical History of the War" and the collecting of material for the Sanitary Division of the proposed new Army Regulations.

The most difficult class of work handled by the section had to do with the discharge from the service of temporary military personnel undergoing physical reconstruction. The policy of the War Department from the start has been to retain such personnel in the service until each individual had reached the maximum degree of improvement to be expected in view of his disabilities, except in the case of those who desired discharge and who had funds, or friends or relatives with funds, sufficient to insure specialized treatment in civil life. Many enlisted men, for various reasons, desired immediate discharge even though they had not reached the maximum degree of benefit. Much pressure was brought to bear from sources outside the War Department to accomplish discharge, even though it was clearly not for the best interests of the patient. When the compensation allowed by the Bureau of War Risk Insurance was increased by act of Congress, and became, for total disability, much greater than the pay of an enlisted man, the desire for discharge was increased. In the case of commissioned officers, except second lieutenants, the pay on the active list is greater than the maximum compensation allowed by the Bureau of War Risk Insurance, and, consequently, many have desired to remain in the service after the medical authorities have reached the conclusion that maximum benefit had been attained. In numerous instances such officers have brought influence to bear on the War Department with a view to compelling their retention in the service. The majority of such cases were individuals suffering from tuberculosis. The Army

reorganization act of May 18, 1920, contains the following paragraph bearing on this subject:

The President is authorized and directed to retain in service disabled emergency officers until their treatment for physical reconstruction has reached a point where they will not be further benefited by retention in a military hospital or in the military service.

This paragraph appears to have been misinterpreted by many sick officers and as a result of it some sought to remain in the service after they had manifestly reached the maximum benefit in *reconstruction* that was to be expected. The views of this office as to the proper interpretation of the above quotation were set forth in the following letter, dated July 19, 1920, which was approved by the War Department:

I have received your letter of July 24 with reference to the discharge of emergency officers who are undergoing physical reconstruction in the Army hospitals. This question has always been one of the deepest concern to the medical officers of the Army and my constant policy has been to interpret most liberally any legislation or instructions regarding the matter.

* * * * * * *

It is my opinion that the proper interpretation of this clause, and the one which was contemplated by the Congress, is that disabled officers should be retained in military hospitals so long as they are showing any improvement in their physical condition and also so long as their past medical record warrants the belief that improvement may be expected. When it becomes clear that the condition of any officer patient is growing worse month by month, or when it is apparent for a period of several months that no improvement is being made, and when in either instance the patient's condition fails to furnish any grounds for expecting improvement in the future, then I believe his treatment for physical reconstruction has reached a point where further benefit can not be expected by his retention in a military hospital or in the military service. Consequently his discharge is indicated under the provisions of the law.

In rare instances when the condition has long been stationary, improvement may suddenly appear, but to retain all patients indefinitely, with only a vague hope of such a consummation in an occasional case, seems to me contrary to the intent of the existing law. Such a policy would require the continued maintenance of large military hospitals with the necessary medical personnel and matériel; for such a procedure the Medical Department appropriations are not sufficient. The Congress has provided abundant facilities for the care and compensation of discharged officers and soldiers through the agency of the Bureau of War Risk Insurance, and it is my firm belief that when the Medical Department of the Army has accomplished all that can be expected in the way of the physical reconstruction for our disabled military personnel, as indicated in the preceding paragraph, the individuals should be discharged from the military service and should pass into the care of that Bureau. Arrangements have been constantly in effect by which no patient was discharged from an Army hospital until provision had been made for his further care and treatment through the Bureau of War Risk Insurance, provided such care was necessary; in other words, continuous hospitalization is furnished by the Government for all patients whose condition necessitates it, and no such patient is compelled to make arrangements for his own medical attention.

LABORATORY DIVISION.

General Activities.

During the fiscal year ending June 30, 1920, the principal activities of this division have been those relating to demobilization, the further development of existing activities, and the working out of the many problems relating to reorganization of the Army, in which this division was concerned.

The specially trained commissioned and enlisted laboratory personnel available in the permanent establishment prior to the World

War was quite limited and did not meet the then existing requirements. During the war the situation was met by the assignment of temporary officers and the establishment of special training schools. Demobilization, however, has been carried out so rapidly that all this personnel, both commissioned and enlisted, was returned to civil pursuits during the year. To meet the need created thereby, special courses of instruction were organized at the Army Medical School and special instruction was given at the Army Medical Museum, department laboratories, and certain general hospitals. The shortage still is acute, since efficiency in laboratory work is only attained by instruction extending over a prolonged period of time. The critical period, however, has been passed and the situation will continue to improve.

The progress of the demobilization is indicated in the tabulation set forth below, which shows the personnel engaged in laboratory work on the dates given.

	July 1, 1919.	Oct. 1, 1919.	Jan. 1, 1920.	Apr. 1, 1920.	July 1, 1920.
Medical officers (regular)	502	218	54	50	62
Medical officers (temporary)			35	30	23
Sanitary corps officers	251	150	20	20	18
Veterinary Corps officers			2	2	2
Infantry officers	1	1	1	1	1
Civilian technicians	82	50	40	27	19
Total	836	419	152	130	126

As will be seen the number of officers and civilian technicians in service on July 1, 1919, was 836, while a year later (July 1, 1920) the total was 126, the lowest point having been reached during the week ending May 27, 1920, when it was only 117.

Notwithstanding the shortage in personnel a number of research problems have been initiated under the supervision of the Army Medical School and the progress already made promises additional knowledge of practical application in the control and prevention of disease.

Additional department laboratories have been established and for several months each geographical department within the continental limits of the United States has had its department laboratory or one acting as such.

A most comprehensive, thorough, and complete study of the future requirements of the laboratory service for an expeditionary force—organization, personnel, equipment, transportation, and functions—has been made by an officer on duty at the Army Medical School specially qualified for this work, and the authorized number of units of equipment are now being assembled at the Field Medical Supply Depot, Washington, D. C. The Medical Department now has a system of portable laboratory units that is unexcelled and the officers who have worked out these units in such complete detail are deserving of the highest credit.

Very considerable progress has been made in building up the activities of this division relating to preventive medicine and plans are under way to still further emphasize the importance of preventive medicine to the military service.

The amount of constructive work accomplished by the curator of the Army Medical Museum and his assistants during the past year has far exceeded the most sanguine hopes and expectations of this office and these officers deserve the highest credit for the energy and efficiency they have displayed in preserving, mounting, and classifying, for educational and exhibition purposes, the immense amount of pathological material, photographs, wax models, motion-picture films, and other material of historical and educational value collected during and prior to the World War. When the plans now under way are consummated, the Army Medical Museum will be, in many respects, the most notable and complete in the world.

The only change in the general organization of this division during the past fiscal year has been the removal of the section for "Combating venereal diseases." A new division was established in the office dealing with this phase of preventive medicine.

The activities of the Division of Laboratories and Infectious Diseases during the past fiscal year, therefore, have been carried on under three sections: Laboratories, Infectious diseases, and the Army Medical Museum. A brief résumé of the activities of each section follows:

Laboratories Section.

Personnel, commissioned.

The rapidity of demobilization during the past year and the large number of resignations of medical officers of the permanent establishment specially trained in laboratory work has resulted in an acute shortage of properly trained laboratory officers. This has been met, in part, by the redetail to the Laboratory Service, by the Personnel Division, of medical officers of the permanent establishment who were assigned to laboratory duties prior to the outbreak of the World War. Additional officers were secured by means of a circular letter sent to the large general hospitals calling for volunteers for laboratory assignment. Those officers having special qualifications for this work were sent to the Army Medical School for special short courses in laboratory procedure, on completion of which they were assigned to laboratory duties. Several members of the class graduated from the Army Medical School in May, 1920, have shown special aptitude for laboratory work and will be given assignment for this character of work.

While the most urgent requirements have been met and conditions are improving rapidly, it will not be possible for two or three years to obtain an adequate group of officers possessing the special qualifications required for general laboratory work.

Personnel, Enlisted.

The greatest difficulty has been experienced throughout the year in securing recruits for special training in laboratory technique, since much of the work is of a complicated nature, and efficiency is not possible unless the fundamental principles underlying the various procedures are understood. Basic educational qualifications somewhat above the average are a necessity, and it has been difficult to secure recruits with such attainments.

Endeavors have been made to improve and expand the educational facilities along these lines in harmony with the educational system established throughout the Army. Special courses in laboratory technique for enlisted personnel have been organized at the Army Medical School; chief surgeons of departments have been authorized to designate one or more men from the various stations within their jurisdiction for technical instruction at the respective department laboratories; and at certain general hospitals classes in laboratory methods have been initiated both for duty personnel and for convalescent patients. A number of the laboratory technicians receiving this training have taken their discharge to accept positions carrying a monthly pay of from $125 to $175 per month.

Personnel, Civilian.

During the World War a large number of civilians (women) were given special training in laboratory methods and assigned to stations throughout the Army. Many female technicians also were drawn from civil institutions. Retrenchment, however, has been necessary, and these civilian technicians have been discharged as rapidly as their services could be spared or replacements provided. On July 1, 1919, there were 82 civilian technicians in service, while on July 1, 1920, the number had been reduced to 19. Further reductions will be made as enlisted replacements can be provided.

Personnel, Nurses.

During the past year, in cooperation with the nursing section of this office, the experiment was begun at two of the Army general hospitals (General Hospital No. 19 at Oteen, and General Hospital No. 21 at Denver) of establishing a course of training in laboratory methods for convalescent nurses. This experiment has worked out very happily and several excellent technicians have been developed. It is the intention to extend this phase of training and permit other members of the Army Nurse Corps, who for one reason or another are not fit physically to do general nursing, to take this training with a view to their assignment to special laboratories.

Department Laboratories.

Prior to July 1, 1919, department laboratories had been established and were functioning in the following departments: Southeastern, Southern, Central, Western, Hawaiian, and Philippines. During the past fiscal year department laboratories also have been organized and are functioning for the remaining geographical departments, except in the Department of Panama, the work for which is done at the Public Health Laboratory of the canal government at Ancon.

The department laboratory, Central Department, was transferred from Fort Leavenworth, Kans., to Fort Sheridan, Ill., October 20, 1919.

The laboratory for the Northeastern Department was established at Fort Banks, Mass., and for the Eastern Department in the Army Building, Whitehall Street, New York City.

Three of the department laboratories are officially the laboratories of general hospitals, and are designated as acting department labora-

tories for the departments in which they are located, namely, laboratory, Lawson General Hospital, Fort McPherson, Ga., acting department laboratory, Southeastern Department; laboratory, Lovell General Hospital, Fort Sheridan, Ill., acting department laboratory, Central Department; and laboratory, Letterman General Hospital, San Francisco, Calif., acting department laboratory, Western Department. Administratively, this situation is an anomalous one, as the general hospitals are under the direct control of the War Department. However, the work done for the departments in these laboratories has been confined entirely to technical professional work, and mutual informal arrangements have been made between the department surgeons and commanding officers of the general hospitals concerned to the end that all departmental work might be expeditiously and satisfactorily performed. This anomalous situation will, for the most part, disappear when the general hospitals at Fort Sheridan and Fort McPherson are reclassified as station hospitals and revert to departmental control.

Plans are now being perfected for changing the status of department laboratories to corps area laboratories and for the organization of area laboratories in those corps areas not already provided for, in order that administratively they may conform to plans of the War Department.

During the past year special emphasis has been laid on the fact that department laboratories should function as public-health laboratories and should be used freely in all problems connected with the prevention and control of communicable diseases in the area served by them, as well as for routine laboratory work for local hospitals. It is the intention of this office to still further emphasize the public-health functions of these units.

SUMMARY OF LABORATORY WORK DONE AT STATIONS IN THE UNITED STATES.

In order that this office might have definite information concerning the amount and the character of the laboratory work being done at the various laboratories throughout the Army, a standard blank form for the submission of monthly reports was instituted at the beginning of the fiscal year. This report conforms closely to the one adopted by the American Expeditionary Forces in France and, as was the experience in France, has been of great value to the office in estimating the character and amount of laboratory work done at the various stations. The reports are analyzed critically, and if the work being done is poorly balanced, too small in amount, or otherwise below standard, the necessary steps are taken to correct it. The total number of the various types of examinations carried out in the laboratories in the United States and in the laboratory of the station hospital at Coblenz, Germany, is shown in figure 45.

Attention is invited to the fact that, notwithstanding a decrease of 74.85 per cent in the average total commissioned and civilian personnel of the periods July 1, 1919, to December 31, 1919, and January 1, 1920, to July 1, 1920, the total laboratory examinations carried out for the six-month period January–June, 1920, was only 12.53 per cent less than for the first six months of the fiscal year (July–December, 1919). During the fiscal year there was a reduction in troops in the United States from approximately 300,000 on July 1,

1919, to about 160,000 in June, 1920, and, notwithstanding this reduction, the amount of laboratory work done during the latter half of the year was seven-eighths of that done during the first half (July -

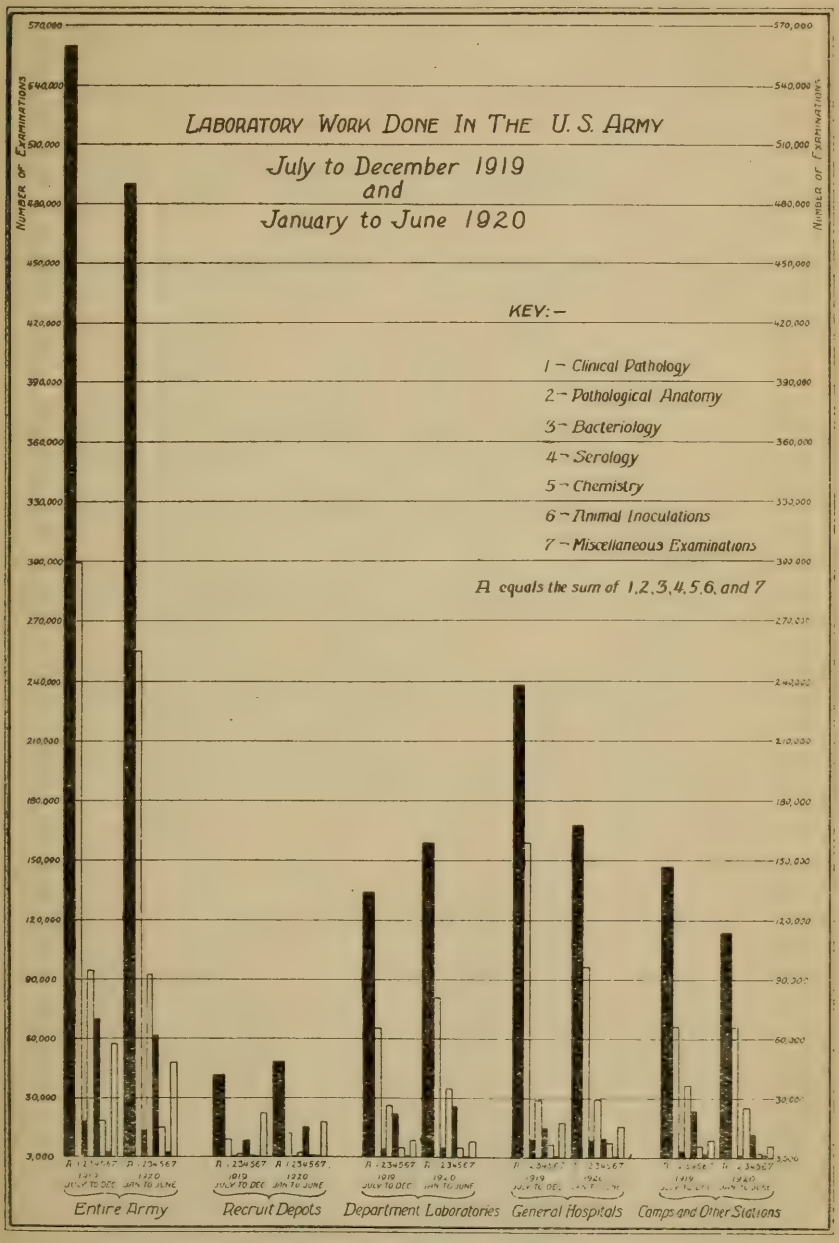


FIG. 45.

December, 1919). It is evident, therefore, that the laboratories throughout the service are being used to a greater extent now than was the case even six months ago.

TABLE 88.—*Comparison of the amount of laboratory work done in the United States Army in the United States for the two periods July–December, 1919, and January–June, 1920.*

	July–December, 1919.					January–June, 1920.					
	Recruit depots.	Department laboratories.	General hospitals.	Camps and other stations.	Total.	Recruit depots.	Department laboratories.	General hospitals.	Camps and other stations.	Total.	Grand total.
Clinical pathology:											
Blood—											
Erythrocyte counts	105	2,655	5,031	2,050	9,841	249	4,539	3,734	1,168	9,680	19,521
Leucocyte counts	474	4,718	7,903	4,476	17,571	523	5,627	4,745	3,390	14,285	31,856
Differential counts	370	4,012	5,518	3,313	13,213	487	3,974	5,310	2,806	12,577	25,790
Hemoglobin estimations	112	2,035	4,585	1,183	7,915	181	1,652	2,898	1,196	5,927	13,842
Malaria examinations	270	2,283	1,507	2,060	6,120	282	1,266	1,438	1,490	4,476	10,596
Urine, routine analysis (chemical and microscopical)	2,815	21,958	11,665	28,302	94,740	6,240	27,921	31,537	38,657	104,355	199,095
Feces—											
Examinations for parasites and ova	152	5,561	3,220	1,290	10,223	511	6,151	2,828	1,736	11,226	21,449
Other examinations	43	2,183	905	2,163	5,294	326	1,356	1,292	826	3,800	9,094
Sputum—											
Smears for tubercle bacilli	430	8,201	64,417	6,243	79,291	455	14,746	24,040	5,254	44,495	123,786
Smears for other organisms	661	1,051	3,271	2,210	7,193	652	1,597	1,865	1,030	5,144	12,337
Spinal fluid—											
Smears	10	54	156	134	354	5	112	68	82	267	621
Differential counts	0	339	85	9	433	8	158	75	18	259	692
Cell counts	12	520	195	35	762	10	331	213	66	620	1,382
Globulin tests	22	518	224	3	767	3	350	319	8	680	1,447
Colloidal gold reactions	2	466	39	289	796	0	154	244	140	538	1,334
Venereal lesions—											
Smears for gonococci	3,359	5,578	14,207	3,503	26,647	2,381	7,789	5,630	4,694	20,494	47,141
Smears for B. ducrey	15	5	64	299	383	32	4	19	321	376	759
Dark-field examinations for T. pallidum	98	1,237	333	499	2,167	163	2,312	290	511	3,276	5,443
Stained examinations for T. pallidum	18	37	127	112	294	39	13	14	26	92	386
Clinico-pathologic examinations not otherwise listed	279	1,810	5,525	7,815	15,429	259	912	9,466	2,102	12,739	28,168
Total	9,247	65,221	158,977	65,988	299,433	12,806	80,964	96,015	65,521	255,306	554,739
Pathological anatomy:											
Autopsies	2	110	316	792	1,220	10	133	649	122	914	2,134
Gross specimens preserved	344	1,927	501	380	3,152	264	1,626	298	615	2,803	5,955
Gross specimens sent to Army Medical Museum	0	290	486	1,703	2,479	0	113	1,001	0	1,114	3,593
Histological specimens mounted	2	2,103	4,466	329	6,900	5	2,650	4,738	10	7,403	14,303
Histological specimens sent to museum (Specimens to include both surgical and autopsy material.)	0	34	3,250	248	3,532	3	31	1,401	10	1,445	4,977
Total	348	4,464	9,019	3,452	17,283	282	4,553	8,087	757	13,679	30,962

Bacteriology (specimens cultured):											
Blood	33	296	360	595	1,284	42	542	457	415	1,456	2,740
Urine	163	1,137	2,271	2,200	5,771	103	2,611	3,883	1,874	8,471	14,242
Feces	187	2,673	3,874	3,003	9,737	139	7,390	2,002	5,576	15,107	24,844
Sputum—											
For pneumococci, not typed	46	42	81	50	219	111	427	184	324	1,046	1,265
For pneumococci, typed by mouse method	66	60	171	126	423	487	439	610	192	1,728	2,151
For pneumococci, typed by other methods	1	155	155	73	384	76	229	240	116	661	1,045
For other organisms	57	141	156	133	487	53	233	255	73	614	1,101
Nasopharyngeal—											
For B. diphtheriæ	181	9,479	5,907	5,482	21,049	464	4,893	4,560	6,815	16,732	37,781
For meningococcus	71	142	522	1,925	2,660	6	562	555	46	1,169	3,829
For streptococcus	17	769	1,217	1,874	3,877	394	2,485	6,960	1,015	10,854	14,731
For other organisms	373	468	3,077	4,123	8,041	442	1,167	5,769	1,183	8,561	16,602
Spinal fluid, specimens cultured	4	1,573	57	88	1,722	6	214	44	51	315	2,037
Pus, exudates, etc., specimens cultured	16	7,385	3,362	2,307	13,070	67	7,313	592	1,695	9,667	22,737
Autopsies, total original cultured from	0	113	302	77	492	68	682	389	2	1,141	1,633
Milk, specimens cultured	19	422	745	595	1,781	17	422	530	376	1,345	3,126
Water, specimens cultured	33	754	298	1,235	2,320	23	2,189	450	3,851	6,513	8,833
Other cultures made	467	1,085	7,350	12,706	21,608	163	3,207	2,377	1,758	7,505	29,113
Total	1,734	26,694	29,905	36,592	94,925	2,661	35,005	29,857	25,362	92,885	187,810
Seriology:											
Agglutination tests—											
Typhoid and paratyphoid	29	373	2,890	2,849	6,141	116	281	2,229	2,505	5,131	11,272
Meningococcus	4	1	3	183	191	0	2	41	4	47	238
Pneumococcus	50	41	50	288	429	50	283	123	379	835	1,264
Dysentery	9	19	16	4	48	0	37	24	2	63	111
Blood, specimens grouped for transfusion	0	448	514	65	1,027	0	154	112	343	609	1,636
Complement fixation tests—											
For syphilis	6,827	19,895	11,491	19,133	57,346	14,955	22,339	6,901	7,013	51,208	108,554
For gonorrhea	1,256	49	469	202	1,976	78	32	15	478	603	2,579
For tuberculosis	2	425	145	15	587	0	26	14	5	45	632
For glanders	57	909	1	320	1,287	45	96	0	0	141	1,428
For others	0	536	50	55	641	0	1,107	100	107	1,314	1,955
Precipitin tests	5	48	14	107	174	30	1,282	23	287	1,622	1,796
Total	8,239	22,744	15,643	23,221	69,847	15,274	25,639	9,582	11,123	61,618	131,465
Chemistry (quantitative determinations):											
Blood—											
CO_2 combining power	0	427	42	6	475	0	484	12	10	506	981
Chlorides	0	5	21	3	29	0	5	0	4	9	38
Cholesterin	0	1	0	4	5	0	17	8	0	25	30
Creatinin	0	3	6	19	28	0	11	8	51	70	98
Glucose	27	85	10	12	134	45	80	3	7	135	269
Total nonprotein N_2	0	1	118	13	132	0	42	118	14	174	306
Urea N_2	0	5	71	8	84	0	42	100	6	148	232
Uric acid	0	0	5	5	10	0	10	11	2	23	33

TABLE 88.—*Comparison of the amount of laboratory work done in the United States Army in the United States for the two periods July–December, 1919, and January–June, 1920*—Continued.

	July–December, 1919.					January–June, 1920.					
	Recruit depots.	Department laboratories.	General hospitals.	Camps and other stations.	Total.	Recruit depots.	Department laboratories.	General hospitals.	Camps and other stations.	Total.	Grand total.
Chemistry (quantitative determinations)—Continued.											
Urine—											
Acetone bodies	7	123	426	61	617	32	94	629	48	803	1,420
Albumin	23	1,365	2,200	578	4,166	49	540	579	360	1,528	5,694
Chlorides	0	112	164	11	287	0	88	92	25	205	492
Glucose	11	677	604	478	1,770	0	276	467	379	1,122	2,892
Renal efficiency tests	0	114	847	24	985	5	104	176	9	294	1,279
Total nonprotein N_2	5	7	127	6	145	0	22	82	1	105	250
Urea N_2	0	45	225	167	437	45	921	118	113	1,197	1,634
Drugs, food, beverages, etc	2	298	143	344	787	4	264	57	170	495	1,282
Milk analyses	44	250	773	1,556	2,623	58	191	4,427	657	5,333	7,956
Water analyses	160	213	524	2,772	3,669	181	468	257	585	1,491	5,160
Sewage analyses	11	1,766	117	126	2,020	0	1,016	60	120	1,196	3,216
Total	290	5,497	6,423	6,193	18,403	419	4,675	7,204	2,561	14,859	33,262
Animal inoculations	54	632	492	1,698	2,876	55	709	408	1,811	2,983	5,859
Procedures not otherwise listed	22,003	8,752	17,519	8,808	57,082	17,722	8,063	16,005	6,354	48,144	105,226
Total	47,915	134,004	237,978	145,952	559,849	49,219	159,608	167,158	113,489	489,474	1,049,323

During the last six months of the fiscal year there was an actual increase in the amount of work being done in the department laboratories and in laboratories at recruit depots. The decrease in the amount of laboratory work done in general hospitals and camps is due to the closure of a number of general hospitals and camps during the year. The dropping off of the work being done in general hospitals was confined largely to clinical pathological procedures, while the amount of bacteriological and chemical work remains at practically the same level throughout the year.

The laboratory service for the American forces in Germany is most satisfactory. The large station hospital in Coblenz has an efficient laboratory service, in which approximately 5,000 to 8,000 examinations are carried out each month.

STANDARDIZATION OF EQUIPMENT.

In coordination with the Supply Division a large amount of work has been done by the Feld Medical Supply Depot and the Army Medical School in the standardization of laboratory equipment, glassware, chemicals, and reagents, and in the preparation of definite specifications for these supplies. As one example of such standardization may be cited the item microscopes. The microscopes on hand at the various stations throughout the United States were of various types, and the working parts—oculars, objectives, condensers, etc.—were in many instances not interchangeable, necessitating the purchase of spare parts to fit the particular manufacture and model of instrument on hand. The supplies of standard instruments of American manufacture on hand permitted standardization, without extra expense to the Government, of post microscopes with interchangeable parts. The spare parts of the compact microscope adopted for field use also interchange with, and can be used with equal facility with, the post microscopes. All nonstandard microscopes will be called in and sold. This standardization will greatly simplify the supply problem relating to these items.

SUPPLY TABLES.

A very large amount of work has been done at the Feld Medical Supply Depot, Army Medical School, and by this division, in an advisory capacity to the Supply Division in the revision of supply tables for laboratory equipment, chemicals, and reagents.

LABORATORY EQUIPMENT FOR USE IN THE FIELD.

The first field laboratory equipment for the Medical Department was adopted in 1908. This unit was intended for bacteriological examinations of water supplies. In 1909 the original equipment was amplified and provision was made for bacteriological examinations of stools, urine, and blood, for the organisms of the typhoid group and the bacillary dysenteries. A still further amplification was suggested a short time later following experiments with laboratory equipment in the field, but no further revision had been officially approved at the outbreak of the World War.

The necessity for complete portable laboratories to handle epidemics of communicable diseases and for routine work was recognized by the chief surgeon, American Expeditionary Forces, in France, soon after our entry into the war, and a specially qualified officer was designated to work out the details of equipment and construction for a portable unit. This problem was solved in a highly satisfactory manner. In the spring of 1919 the same medical officer was designated to continue studies of laboratory equipment in the American Expeditionary Forces with a view to suggesting such changes and improvements as practical experience during the war might indicate as necessary. In July, 1919, he was designated, under the general supervision of the commandant, Army Medical School, to make a complete study of the laboratory service for future expeditionary forces, including activities, equipment, transportation, and personnel.

A most complete and comprehensive report was submitted for use by the Coordination, Organization, and Equipment Division of the Surgeon General's Office for incorporation in the reorganization tables of the Army. The equipment tables for the various units of the field laboratories were then turned over to the Field Medical Supply Depot, Washington, D. C., and the officer in charge was designated to devise the most practical method of packing to withstand rough handling in the field. This problem also has been solved in a most satisfactory manner. Most of the items for this equipment already were on hand in the depots, and within a short period of time a sufficient number of these units will have been assembled to meet the authorized requirements.

RESEARCH.

A very considerable amount of research work has been done during the past year notwithstanding the shortage in commissioned personnel. Many of the results already have been published in scientific journals, and detailed statements concerning them will be found in that section of this report devoted to the Army Medical School, while other work of this character will be referred to under the section of infectious diseases.

As examples of the researches undertaken at the Army Medical School that have a very practical bearing on the preservation of the health of troops, the following are cited: Experimental tests of sterilizing agents to be carried by the individual soldier for use in emergency in the sterilization of drinking water. To meet practical requirements such an agent should preferably be in tablet form, capable of dissolving quickly in a canteen full of water, and necessarily must be highly stable because of the necessity for storage over considerable periods of time. Experiments already have been under way for six or eight months, and satisfactory progress is being made.

A considerable amount of experimental work has also been carried out at the Army Medical School on the value of soaps prepared from differing bases as disinfecting agents and more particularly their action on pathogenic organisms affecting the respiratory and intestinal tracts. The results of this research will be applied practically in the formulation of regulations relating to standard meth-

ods of washing dishes in military organizations. Already some results of practical importance have been attained.

A study of "carriers" of the pathogenic organisms of certain infectious diseases has also been undertaken and will be continued indefinitely. Additional and more definite knowledge concerning the exact routes by which many of the communicable diseases travel from the sick to the well individual is of the utmost importance to the military service.

Efforts are being made at the Army Medical School to throw more light on the unsolved problem of the etiology of influenza, and experiments are being carried on with antipneumococcus vaccines with the view of their employment as preventive measures.

PLANS FOR THE FUTURE.

The complete study of the laboratory service for an expeditionary force referred to in the preceding paragraph already is in the hands of the Coordination, Organization, and Equipment Division of this office and is being incorporated in reorganization tables for the Army.

It is the intention to emphasize more and more the importance and value of laboratory training in the practice of medicine in its various phases and to adapt the laboratory service throughout the Army to the authorized general educational system. Medical officers who have demonstrated their fitness for further instruction and training in internal medicine will be given the opportunity, so far as is possible, to secure training in diagnostic laboratory methods in the laboratories of the large general hospitals; those who have demonstrated their fitness for further training in preventive medicine will be given similar opportunities in the corps area laboratories; while a smaller group of specially qualified officers with special and broad training in research problems will be given opportunity to investigate problems the solution of which may promise to be of value to the Army and therefore to mankind in general.

The instruction and training of enlisted personnel in laboratory methods will be continued and further amplified, and it is anticipated that a considerable number of men who have secured this training will be able to command good salaries in Public Health and other laboratories throughout the United States when discharged from the service.

Infectious Disease Section.

FUNCTION.

The general activities of this section are mainly those relating to the study and analysis of the communicable disease situation in the Military Establishment and the initiation of measures for the control and prevention of this group of diseases. The work of this section is closely interwoven with many of the activities of the Division of Sanitation and the closest coordination is maintained.

ANALYSIS OF CURRENT STATISTICS.

The Division of Sanitation is charged with the collection of current statistics covering the movement of communicable diseases throughout the Army. The reports received by that division are used by the

Division of Laboratories and Infectious Diseases. The standard form adopted for the collection of these statistics at the beginning of the war (Form 86, M. D.) is not altogether satisfactory for certain studies it is now desired to carry out. The infectious diseases section of this division, in collaboration with the Division of Sanitation, has been engaged in the preparation of a new and more complete form for reporting current statistics, together with explicit directions for its preparation. The revised form has been used experimentally at a limited number of selected stations and will shortly be submitted for adoption throughout the Army.

During the World War current statistics were submitted daily by telegraph, from practically all stations. During the past fiscal year the time interval for rendition has been reduced to weekly intervals. The reports are tabulated by the Division of Sanitation and turned over to the section of infectious diseases of this division for analysis. They are analyzed in detail, charted by diseases, and a brief review of the communicable disease situation is prepared for inclusion in the weekly report of the Surgeon General to the Chief of Staff. When the consolidated rates for the entire Army are excessive or the rates for any one or more stations exceed the mean average normally anticipated, steps are taken to determine the source of infection or the reason for the high rates and to initiate measures for control and prevention.

STATISTICS OF COMMUNICABLE DISEASES THROUGHOUT THE WORLD.

Through the cooperation of the United States Public Health Service, the vital statistics section of the Bureau of the Census, and through the medium of the health bulletins of State and city boards of health, this office is enabled to keep in close touch with the movement of communicable diseases throughout the United States. A close liaison has been established with the Military Intelligence Division of the General Staff, and information concerning outbreaks of epidemic diseases throughout the world is transmitted by them to this office. Information concerning the prevalence of epidemic diseases which, directly or indirectly, may affect the health of the military forces, is published to the Medical Corps, as occasion arises, through the medium of the Medico-Military Review issued by this office on the 1st and 15th of each month.

ANALYSIS OF PERMANENT STATISTICS.

The permanent statistics (sick and wounded records) of the Surgeon General's Office in many respects are unexcelled for statistical purposes along certain lines. They are prepared by the Division of Sanitation and made available to the Division of Laboratories and Infectious Diseases for study. Several analytical surveys have been undertaken during the past year and others are planned for the immediate future. As an example of the character of the studies already completed, the following is cited: It was considered desirable, for educational and disease-control purposes, to construct charts showing the average rate of incidence in the Army, over a period of a number of years, of the most important of the communicable diseases, such rates to be considered the "normal" rates for lack of a better term. While

for some of the diseases considered the rates would be influenced markedly by locality in which the command was stationed [1] or by other factors, the average rates for many of the communicable diseases should be approximately the same for all troops. In cooperation with the officer in charge of the medical records section of the Division of Sanitation, such an analysis was made. The 13-year period from 1903 to 1915, inclusive was selected as these years represented a long period during which the sick rates were not influenced by such disturbing factors as the mobilization or demobilization of large forces and represented normal peace conditions. The average admission and death rates for certain of the major communicable diseases (except venereal diseases) were determined for the 13-year period. The annual variations from the average were small and of no importance except in the cases of typhoid, paratyphoid, and malarial fevers. Progress in the control of these three diseases in the Army has advanced with such rapidity that rates prior to 1911 are of no value as approximating what might be considered the present-day normal rate. Therefore, the 5-year period 1911–1915 was used in determining the average admission and death rates for typhoid, paratyphoid, and malarial fevers. The charts showing the average or "normal" rates are shown on pages — to — under the discussion of infectious diseases.

A superficial examination of these charts leads one to speculate as to the reason for certain variations in the curve. For example, one would ordinarily expect the mortality curve to follow in general the curve for admissions. This, however, has not held good for meningitis or diphtheria and probably is due to the fact that both these diseases ordinarily prevail in epidemic form during the winter mionths, occurring only sporadically during the summer. Because of their occurrence as isolated and sporadic cases during the summer months, the exact diagnosis is not made with sufficient promptitude. It has been clearly demonstrated that the mortality rates of these two diseases can be greatly reduced, provided serum treatment is begun in the very early stages and the deviation of the mortality curves of these two diseases as shown in the above chart doubtless is due to the failure to carry out the proper therapeutic measures—serum treatment—at a sufficiently early stage of the disease.

This deviation of the mortality curve from the normal has been particularly noticeable in the case of meningitis during the past fiscal year and the great importance of early diagnosis has been emphasized and will continue to be emphasized, as occasion arises, in the Medico-Military Review.

In order that the information contained in the charts discussed above may be constantly available at all stations throughout the Army, a wall chart 3 by 5 feet in size has been prepared on which is plotted, for comparative purposes, the average annual admissions and death rates. This will be distributed in the near future to all stations. It is the intention that this chart will be placed in the office of the surgeon or sanitary inspector at each station and that the current rates, expressed in admission and death rates per 1,000 per annum, for each of the important communicable diseases, will also be plotted each month, to the end that all local authorities

[1] Example: High malarial rates in the malarial belt and low rates in the nonmalarial belt, dependent on the presence or absence of malaria-transmitting mosquitoes.

may not only be continuously aware of the current movement of communicable diseases in their commands but will also be able at once to compare current rates with the average rates for the Army over a period of several years. This chart will be a constant reminder of the influence of the sick rates at any one station on the Army rates as a whole. The existence of abnormally high rates or exceptionally low rates as compared with average rates over a period of several years will be equally obvious to the commanding officer, the local surgeon, or a visiting inspector. The mere realization that the prevalence of any communicable disease is abnormally high is frequently the only stimulus necessary to assure the initiation of the necessary control measures.

THE MEDICO-MILITARY REVIEW.

The Medico-Military Review, issued on the 1st and 15th of each month, was begun in December, 1919, as a supplement to the Bulletin of the Office of the Surgeon General. Its purpose is to serve as a medium through which items of current interest and importance, especially those of a medico-military nature, and information bearing upon the problems of disease control, can be brought together and made available to the Medical Department at frequent intervals. The issues of this bulletin contain summaries of approved new projects on medico-military subjects, summaries of recent knowledge relating to the methods of prevention and control of communicable diseases, notes on epidemics of disease throughout the world, advice concerning the initiation of disease-control measures in anticipation of the increased prevalence of certain communicable diseases during certain seasons of the year, tabulations of current rates of the major communicable diseases, notes on reorganization, reviews of the movement of communicable diseases in the Army, and other information of interest and value to the Medical Department. Approximately 750 copies of each issue are distributed to the various Army stations, to officers of the Medical Department on detached service, and to a few medical journals and medical libraries.

This supplement to the Bulletin of the Surgeon General's Office already has demonstrated its value from an educational point of view, and it enables the Surgeon General's Office to keep the officers of the Medical Department constantly informed of approved new projects and policies, thus increasing their knowledge of, and keeping them in touch with, the broad general activities and policies of the Surgeon General's Office. It is the intention to further emphasize its educational features and to include a considerable amount of information of educational value and interest to the medical section, Officers' Reserve Corps, if the means can be made available to permit its distribution to these officers.

SPECIAL TRAINING IN PREVENTIVE MEDICINE.

Special efforts have been made during the past fiscal year to further stimulate the interest of all officers of the Medical Department in the importance of preventive medicine. In the course of instruction given medical officers at the Army Medical School, on entry into the service, the subjects of hygiene and preventive medicine always

have been emphasized and medical officers have a much broader knowledge of these branches of medicine than their confreres entering the practice of medicine in civil communities. A considerable number of medical officers have always specialized in these branches throughout their career, using their spare time and the many opportunities given them in the service to broaden their knowledge of these subjects. It is the intention to still further develop the training of medical officers in these branches of medicine to the end that morbidity and mortality rates in the military personnel may be still further lowered.

Plans have been formulated and already are being carried into effect to develop in the corps a group of officers with the broadest type of training in public health and preventive medicine. It is intended that this training shall include thorough instruction in practical sanitation, a practical knowledge of the laboratory methods used in the diagnosis and prevention of communicable diseases (to be gained by tours of duty in the laboratory units with divisions and at corps area laboratories), practical graduate instruction in the diagnosis and handling of acute infectious diseases, graduate instruction in the schools of hygiene and preventive medicine which will be possible under the reorganization act, the study of statistics and their interpretation, and practical investigations of epidemic diseases with troops. It is anticipated that within a few years a fairly large group of officers with this broad training will have been developed and will be available for duty as sanitary inspectors of divisions and large camps, assistants to corps area and Army area surgeons, and for other assignments requiring the special qualifications outlined above.

A review of movements of communicable disease for the calendar year 1919 will be found on pages 149 to 183 in the statistical section, under discussion of infectious diseases. In this section of the report will also be found the charts of the various infectious diseases, showing the curves by months for a period of years and a comparative curve for the year 1919 for troops serving in the United States and in Europe.

Army Medical Museum Section.

During the past year the personnel of the Army Medical Museum has been engaged in preparing material collected during the war and placing it on exhibition. In addition, the instruction laboratory of the Medical Department, assigned to the Army Medical Museum, has maintained: a moving-picture department for the purpose of circulating moving-picture films made by the Medical Department during the war; an anatomical art department; a still photographic department; and a wax modeling department.

Owing to the immense amount of material that has accumulated as a result of the late war, it was necessary to enlarge the exhibition space in order to accommodate it. This has been done by fitting up the basement as an exhibition hall for the exhibition of pathological material and X-ray plates. The basement beneath the left wing of the building has been altered in such a manner as to accommodate the very large amount of valuable X-ray material that has been sent to the museum for instruction and display purposes. Storage racks have been purchased for the storage of the plates that have

been retained as most valuable and a large room has been fitted up with light boxes, etc., for the purpose of exhibiting X-ray plates. In addition Cornell board panels have been placed along the walls of the hall leading to this wing and it is intended to place upon them a collection of roentgenographs made from the most valuable of the X-ray negatives that have been sent to the museum. In the future it is intended to utilize this portion of the basement for teaching purposes in connection with the work at the Army Medical School. Owing to the immense number of plates that have been contributed to the museum it will be possible for the instructor in radiology to illustrate the great value in diagnosis of the X-ray, both in medicine and surgery, as the collection embraces many plates illustrating diseases and injuries occurring in almost every locality of the body.

The right wing of the basement has been arranged in such a way as to form an excellent exhibition hall for pathological material. Cases have been constructed and purchased which will accommodate many thousands of specimens illustrating the pathology of disease and injury and it is intended to gradually remove the pathological material from the main floor of the museum to the basement, replacing it by material of more general public interest. By the utilization of the basement, the museum has secured an amount of floor space amounting to almost as much as was occupied before the alterations were made in the basement and it will be possible to exhibit a considerable portion of the material collected during and since the war in this additional space. However, there is so much of this material that the present building, even if entirely devoted to museum purposes, would not be sufficient in size to properly display it, and it is hoped that in the not distant future the new museum building which has been planned as a part of the medical center to be established in connection with the Walter Reed General Hospital will be made available, as otherwise these valuable collections can not be displayed to advantage or as they should be from an instructional standpoint.

All the rooms upon the first floor of the museum wing of the building formerly occupied as offices and workrooms are now used for exhibition purposes with the exception of the room used as an office by the curator and a room for the moving-picture projectoscopes. In these rooms are exhibited the valuable collection of wax models and microscopes owned by the museum, the large exhibit illustrating facio-maxillary surgery, and the Rockefeller models illustrating hookworm disease. A room on this floor has also been devoted to the exhibition of reconstruction work by soldiers at the various general hospitals controlled by the Medical Department.

Important changes have been made in the laboratories of pathology and histology and especially in the photographic laboratory. New and needed equipment has been purchased and these laboratories brought up to date, as regards general equipment.

During the year the work of the museum has been divided into the following departments: Department of pathology and accessions; department of still photography; department of anatomical art; department of entomology; department of wax models; and a moving-picture department.

DEPARTMENT OF PATHOLOGY AND ACCESSIONS.

During the year the personnel of this department has been engaged in preparing and arranging for display the pathological and other museum material collected during and since the war, especially that of value in instruction and research work as regards military medicine, surgery, hygiene, and sanitation. In the year ending July 1, 1920, the following specimens have been accessioned: Pathological, 3,800; surgical, 1,500; neurological, 500; and miscellaneous, 955; a total of 6,755 specimens. This number, while large, only represents actually a small number of the specimens received, since under each accession number are included different organs as well as paraffin blocks of tissue, microscopic slides, photographs, X-ray plates, etc. In regard to microscopic slides alone, over 22,340 were received from various hospitals during the year and accessioned under numbers given to the pathological specimen or specimens. In addition to these 22,340 slides of histological pathology, the histological laboratory at the museum has prepared over 3,000 slides, many specially stained for bacteria, connective tissue and nerve cells, and entailing a great amount of labor. This histological material, and the statistics accompanying it, is a mine of information to those desiring to study preventive medicine and epidemiology, and during the year the muesum has received numerous requests from investigators, who have left the Army, for this material and a considerable amount has been furnished to research workers. In addition, a considerable amount of pathological material has been sent to those who have requested it, when duplicate specimens have been in the possession of the museum. A large laboratory room is being fitted up for research purposes and this room will be available to the medical officers of the public services, active, inactive, and retired, as well as to civilian physicians who are qualified for research work.

The policy of the department of pathology has been to avoid the tendency to collect rare or bizarre specimens, concentrating upon the assembling of pathological material which is essential to the study of disease or injuries. The collections and accessions have been arranged in groups by diseases, and it has been the object to show not only every variety of lesion produced by a special disease but enough specimens so that any type of research can be augmented by the volume of cases presented.

With this object in mind many disease groups have been started, and five of these have already reached considerable proportions. The group illustrating gunshot injuries observed in the late war consists of some 70 selected specimens, displayed by a special method of serial section. The particular value of these specimens is that they show gas gangrene and other infections in their natural colors, affording the surgeon a valuable guide in operative procedure. The serial sections show the three dimensions of fractures and infections in several planes, and their exact relation to important anatomical parts, thus making the section of great value in the study of secondary operations and aftertreatment. This collection is accompanied by X-ray negatives, autopsy protocols, clinical and bacteriological reports, as well as microscopic material, thus making a complete scientific record

of each lesion. The present collection of war injuries is only a nucleus of a display which will probably run into several thousand specimens when completed.

The tuberculosis collection now consists of about 250 specimens, illustrating every type of the disease and almost every lesion which is encountered. This collection had for its beginning the best of the specimens collected at Fort Bayard and has been substantially increased by excellent material from O'Reilly General Hospital, Oteen, N. C. Many other hospitals not especially concerned with the treatment of tuberculosis have contributed their most interesting specimens illustrating this disease, so that the collection represents the best from a very wide source of supply. A display case has been prepared from the finest of these specimens for instruction purposes, containing the most typical illustrations of the different classes of tuberculous infection.

The influenza exhibit of over 300 selected specimens makes a group of the highest scientific value. This group is made up chiefly of material encountered in the investigation of this disease at Camps Dodge, Devens, and McArthur, Walter Reed General Hospital, and other stations. It is accompanied by clinical records and histological and bacteriological reports, thus making it a classical collection illustrating the pathology of influenza as observed during the recent epidemic. These specimens are especially valuable because of the excellent color that they show, due largely to the fact that the investigation groups at the various camps had pathologists attached to them who were well grounded in museum work and were thoroughly acquainted with the modern methods of preserving colors in pathological material.

The museum is fortunate in possessing an excellent group illustrating the lesions of leprosy. This is composed of about 75 pathological specimens collected in 1906 and 1907 by the United States Army Board for the Study of Tropical Diseases in the Philippines. The collection has been sectioned and remounted, and forms one of the most valuable and instructive of the group collections illustrating disease that the museum possesses.

The typhoid, paratyphoid, and dysentery groups, though small, contain extremely valuable specimens.

In addition to the groups mentioned, other groups have been started and will be constantly added to from the mass of pathological material stored at the museum. These groups include diseases of the kidney, of the blood vessels, neoplasms, heart diseases, brain and cord lesions; and veterinary diseases.

The disease groups already formed have been so well selected and displayed that interest among civilian physicans has become greatly increased in the museum during the past year, and local physicians have contributed considerable valuable material to the museum as a result of this interest. The museum furnishes autopsy service to the local Government hospitals, and in this way is able to get a considerable amount of pathological material which it is possible to preserve in such a way as to show the natural colors which are present at the time of autopsy, and in the past 12 months this department has employed new methods in mounting and labeling specimens, which add greatly to their appearance.

During the year a group of technicians have been trained in preparation and mounting, but owing to the lack of suitable men the museum has not accomplished as much in this direction as could have been desired. It is believed that a class of at least six intelligent enlisted men should be kept continually under instruction in pathological technique at the museum, and that as soon as these men are qualified they should be distributed to laboratories in the service where needed. This will not only furnish our laboratories with properly trained pathological technicians but, owing to this knowledge, they will be able to save many valuable specimens for the museum that would otherwise be lost or improperly prepared.

In addition to the pathological material received at the museum, large quantities of medical and surgical equipment have been received from France, England, and Germany. The material from Germany is very complete and illustrates well the equipment of the German Army as regards surgical implements and therapeutic drugs and sera.

The pathological department has been greatly hampered in its work by lack of clerical assistance. The large collections of material from Europe and this country during the war kept the small clerical force at the museum so busy that it was impossible to accession properly a great deal of the material. During the past year the amount of material has decreased and it has been possible to bring the accessioning, together with the filing and cross indexing, well up to date, but even at this time the clerical force is insufficient to do some of the work required of it, as, for instance, the preparation of the volume upon pathology, which includes a catalogue of all material received during the war, and which is to form one of the volumes of the Medical and Surgical History of the War. It will be impossible to prepare this volume unless the museum is allowed an added clerical force for the purpose. The officer in charge of the department of pathology has informed the curator that lack of space necessitates the storing of a great deal of interesting material which should have been placed upon exhibition, and that although the addition of the basement for the display of valuable pathological exhibits has added some much-needed space, it is still not sufficient for the proper arrangement of all collections. The officer in charge of this department estimates that for the pathological specimens of the World War alone the entire present building is inadequate and that these would only take up about 20 per cent of the total exhibition space needed. It is thus evident that the need for a modern building with up-to-date exhibition facilities is a vital one.

It is a matter for congratulation that the Medical Department of the Army collected and contributed to the Army Medical Museum during the few months in which we were actively engaged in war a larger amount of pathological and other material than was collected by the Germans during the entire four years in which they were actively engaged in hostilities.[2] All of this material will be available to the general medical profession of this and other countries for study and research, and when fully classified and prepared for exhibition will undoubtedly represent the most valuable collection of specimens in any museum in the world.

[2] This statement is based upon the figures given in the prospectus for the German "Medical History of the War" (J. A. Barth, Leipzig.)

DEPARTMENT OF STILL PHOTOGRAPHY.

A large part of the work of the photographic department during the year was devoted to the classification and filing of overseas photographs which were secured by the Museum Unit in France during the war. As a large amount of this material was in the possession of the Signal Corps, it was necessary to examine their key files, photographs, and official catalogue, in order to separate the pictures of interest to the Medical Department. Over 20,000 photographs were examined and the pictures made by the Medical Department selected and requested. A portion of these have been received, but due to the fact that a great many pictures of medical interest have also a historical value, and, in many instances, are of interest to other departments, it has been impossible for us to secure all the prints selected.

Museum Unit No. 1, sent to France to take the war pictures of medical interest, forwarded about 7,400 prints, some of which were accompanied by original plates. The indexing, captioning, and filing of these plates and prints has consumed a large portion of the time of the personnel of the photographic department during the year, but this work is now practically completed, and the prints and plates are on file in this office for future reference. A great part of this material is valuable for instruction purposes and much will be used in the Medical History of the War. From these prints interesting and instructive lantern slides are being made for distribution to camps and hospitals.

There were on file at the museum about 3,600 negatives taken previously to the war which had not been grouped, captioned, or indexed. This work has been completed and all of the current material has been filed and placed in a general index system. There remains a considerable amount of work along this line, including the indexing of about 1,000 colored plates and prints illustrating the World War and several hundred lantern slides. About 5,000 negatives taken during the Civil War and Spanish War are available for the indexing system, but were separately indexed, and it will be necessary in order to complete the general index to include them in it. The department is now in the midst of this work, which should continue until the whole system of indexing is properly and intelligently extended to include all available photographic records and material of the World War, as well as all previous periods.

During the year the following has been accomplished by the department of still photography in addition to that already mentioned:

Negatives taken and developed:		
12 by 20	2	
11 by 14	14	
8 by 10	1,352	
5 by 7	865	
		2,233
Photographic prints:		
20 by 24	14	
12 by 20	6	
11 by 14	81	
8 by 10	14,602	
6½ by 8½	773	
5 by 7	5,296	
4 by 5	4,771	
		25,543

Enlargements:		
16 by 20	56	
11 by 14	231	
8 by 10	237	
		524
Photostats, 11½ by 14		1,377
Lantern slides		566

DEPARTMENT OF ANATOMICAL ART.

This department has had charge of preparing paintings and colored photographs of pathological material of more than general interest, and many of the paintings being produced will be reproduced in the Medical and Surgical History of the War. In addition to this work the artist assigned to this department has prepared most of the larger labels for museum specimens and the lettered signs for various exhibits in the museum. During the year this department has prepared 33 drawings and charts, 20 painted photographs, over 210 signs and labels, and several water-color pictures. In addition to the work mentioned, the anatomical artist has reproduced epidemiological charts for the Sanitary Division and other divisions of the Surgeon General's Office.

DEPARTMENT OF ENTOMOLOGY.

The work of this department has greatly increased in amount during the past year, owing very largely to a circular letter which was sent to all stations requesting that mosquito collections be made promptly and directing that, if it was impossible to secure collections, the Surgeon General's Office be notified accordingly. During the year the entomologist has received 441 individual collections embracing many thousands of specimens. As an illustration of the great value of this work from the standpoint of sanitation, the following table showing the distribution of the various species of Anophelines which are capable of transmitting malaria is of interest:

Anopheles albimanus (stations in Canal Zone).	Stations.
Anopheles crucians	19
Anopheles ludlowi	2
Anopheles maculipennis	1
Anopheles pseudo-punctipennis	10
Anopheles punctipennis	20
Anopheles quadrimaculatus	17

In no less than 39 stations occupied by the Army in the United States malaria-carrying mosquitoes were found to be present. The yellow fever mosquito, *Stegomyia fasciata*, has been collected from 12 stations in the United States and from stations in the Philippine Islands. Collections have been received from the United States, Hawaii, Philippine Islands, Dominican Republic, Siberia, Alaska, Porto Rico, Canal Zone, and France. At some stations where malaria was notably present no collections have been received, but it is hoped that in the ensuring year this fault will be remedied. Five new species have been described and published from Siberia, two of which were Anophelines. Two new species have been described and published from the Canal Zone. The entomologist has supplied sufficient material in the way of mosquitoes and other insects for use for instruction purposes at the Army Medical School and a large num-

ber of specimens of mosquitoes have been prepared for exhibition at the Army Medical Museum. This exhibit has been enlarged to include various flies, some of which are connected with disease, and insects producing poisonous or painful wounds, or having to do with the destruction or contamination of food.

The identification of the large number of insects, especially mosquitoes, that are sent to the entomologist, is a work of considerable magnitude and is believed to be very important from the standpoint of the prevention of the diseases transmitted by insects. The value of the work is apparently not recognized by some medical officers as indicated by the limited number of mosquito collections which are received from certain posts which are known to be heavily infected.

DEPARTMENT OF WAX MODELS.

Fifty plaster casts and 40 finished wax models have been added to the collection, most of the models representing the lesions of syphilis and skin diseases. The models which have been added are of very great teaching value and the museum is fortunate in now possessing a collection which is believed to be without rival in this country and, with the exception of certain collections in France, perhaps in the world. It has been the aim of this department not only to add to the collection rare conditions affecting the skin, but also to form a collection of the typical lesions which are most commonly observed in the study of skin diseases. In addition to the wax models which were added to the collection, 5 existing models of Army camps were remodeled and repaired, and the 315 models belonging to the Baretta wax model collection were recolored and in some instances were repaired.

The hearty cooperation of local skin specialists has been of the greatest service to this department of the museum in that it has supplied clinical material which would not otherwise have been available. The clinic at the Freedmen's Hospital has furnished specimens from which about one model each week was prepared and the wards of the Washington Asylum have been made available for the use of the Army Medical Museum. This hospital has furnished material for about two models each week, including many interesting and rare conditions.

MOVING-PICTURE DEPARTMENT.

This department has been concerned in the circulation of the moving-picture films which were prepared by the instruction laboratory attached to the museum during the war. There is a large demand from civilian sources, including medical colleges, medical associations, and societies and educational institutions, for many of these films, and whenever possible requests for films have been honored, provided the express charges on the reels were paid by the parties requesting them. It is believed that the museum has been of great help to the medical profession and educational institutions in this way, and it is well worth while to keep the moving-picture films now possessed by the museum in constant circulation. In order to do this the services of at least one clerk are required, as there is considerable work necessary in the conduct of this museum activity. Certain of the moving-

picture films have been in constant demand, especially the film on the "Diagnosis of Tuberculosis," and many commendatory letters regarding the value of this film have been received.

CONCLUSION.

As previously noted, the crying need of the museum at the present time is more room for the display of its material. The building at present occupied by the museum is also occupied by the library of the Surgeon General's Office and it is totally inadequate in size for both of these institutions. The material already exhibited in the museum, if properly displayed, would fill the entire building, while that in reserve, either stored or awaiting preparation, would fill a building twice the size of the one at present occupied by the museum and library. Plans have been made for a museum building, to be included with the Army Medical School as a part of the medical center on the grounds at present occupied by the Walter Reed General Hospital, and it is earnestly hoped that in the near future this building will be available, as otherwise it will be impossible to make the valuable collection belonging to the museum available to medical officers and the medical profession of this and other countries.

The Army Medical Museum is a very valuable connecting link between the Medical Department of the United States Army and the general medical profession of the United States, from the standpoint of scientific medicine and surgery. It has been the policy of the museum during the past year to encourage the use of its collections by civilian physicians and it is believed that only in this way will the museum fulfill its larger function of being not only a place for the exhibition of pathological and other material, but a great instruction center in pathology and epidemiology.

Not only is the museum of value to the medical profession of this country, but it is also of interest to the layman, as shown by the large attendance during the past year. In view of this fact it has been thought best to remove as much of the pathological material from the main museum hall as possible and to replace it with articles of general public interest. Pathological specimens, while of some interest to the public from the standpoint of morbid curiosity, are not of any great value in the instruction of the layman who is ignorant of normal structure as well as the changes occurring in disease of the various organs. It is not believed that it is to the best interest of science to place preparations illustrating human pathology in a public exhibition hall, save in rare instances where lesions are of such character as to be easily understood by the public and to furnish instructive illustrations relating to prophylaxis or home treatment. However, the Army Medical Museum has a distinct function in the instruction of the general public in methods of the prevention of disease as applied to the soldier in the field, methods which could also be adopted in prophylaxis of disease in the home. The public is also interested in the articles of equipment of the medical service and in sanitary models used by the Medical Department in the prevention of disease. It is hoped in the near future to fill the entire floor space of the main museum hall with such material, as well as material illustrating the equipment of medical departments of foreign armies.

VENEREAL DISEASE CONTROL DIVISION.

The Division of Venereal Disease Control was established in the Office of the Surgeon General by Office Order No. 655, dated August 29, 1919. All personnel, equipment, records, etc., of the "Section on combating venereal diseases" of the Laboratory Division were transferred to the Division of Venereal Disease Control. With the demobilization of the Army the very extensive activities promoted by the section on combating venereal diseases in the Laboratory Division had been materially diminished. The law enforcement division of the Commission on Training Camp Activities, closely allied in its medico-legal work with the section on combating venereal diseases, and drawing its personnel largely from the Sanitary Corps of the Medical Department, had been demobilized on March 31, 1919, and its commissioned personnel discharged from the service. A small group of four or five officers remained and functioned until September, 1919, as the legal advisory board of the education and recreation branch, War Plans Division, General Staff. After September, one officer of the Sanitary Corps remained on duty with the education and recreation branch, in charge of the subsection on sex morality and law enforcement in the moral training section.

The commissioned personnel of the law enforcement division, discharged in April, 1919, and the more numerous civilian personnel were immediately assimilated by the United States Interdepartmental Social Hygiene Board and continued field work without interruption and with but little modification other than withdrawal from efforts to promote the enforcement of laws in regard to the sale of alcoholic liquor to soldiers. The functions of the United States Interdepartmental Social Hygiene Board in regard to the control of venereal disease were, and remain, considerably broader than those of the law enforcement division, since they include the protection of men of both the Army and the Navy, as well as the encouragement of research and education in sex hygiene. With the establishment of the Division of Venereal Disease Control the chief of the division was designated a member of the United States Interdepartmental Social Hygiene Board by the Secretary of War.

The activities of the social hygiene division of the Commission on Training Camp Activities were transferred to the section on combating venereal diseases of the Laboratory Division of the Surgeon General's Office on March 25, 1919. Motion-picture films, the motion-picture dramas "Fit to Fight" and "The End of the Road," and stereopticon slides for the use of the automatic stereomotograph were continued in circulation thereafter by the Medical Department among the various posts, camps, and stations of the Army. Literature was similarly distributed in diminished quantities. The supply available, which had been written for use during the active period of the war, was with few exceptions unsuited for post-war instruction. No new matter on this subject has been developed. By the last of September, 1919, supplies of films, stereomotographs, slides, and literature had been forwarded to department headquarters for circulation within the several department areas. Recruit depot posts were also supplied with similar material.

An additional impetus to the promotion of sex hygiene and sex morality in the Army was given by the issue of Section II, General

Orders, No. 135, War Department, 1919 (sex morality), December 23, 1919. This order announced anew the War Department's attitude as definitely opposed to illicit intercourse, which attitude had been previously set fourth in General Orders, No. 17, War Department, 1912. A section of this order, together with other information regarding the efforts of this office and of the War Department to lessen the prevalence of venereal diseases, is quoted on pages 335 and following, Annual Report of the Surgeon General, 1918. Since General Orders, No. 135, War Department, 1919, is of importance and has proven of value in the control of venereal diseases in the Army, it is considerd advisable to reproduce it in part.

II. *Sex morality.*—The statements herein defining the attitude of the War Department toward sex morality are published for the information and guidance of all concerned. The responsibility and influence of officers in making effective the provisions of this order are of the greatest import, and the War Department looks to them to accord their undivided allegiance to this work which presents such large opportunity for national service.

1. The successful experience of the Army in combating venereal disease during the World War indicates clearly that—

a. Continence is not prejudicial to health, and its maintenance is the only sure method of avoiding venereal disease. Measures encouraging it have proved most effective in keeping down rates of venereal disease.

b. Prophylaxis is a measure of disinfection which is provided solely to protect exposed men from the results of their folly and to save their services to the Government. It is not in any sense an expression of approval by the War Department of illicit intercourse. Its use appears to reduce the liability to venereal disease among those exposed to about one-third of what it would be without prophylaxis.

2. On the basis of the foregoing, it is announced as the policy of the War Department to continue to promote sex morality by—

a. Encouragement of continence.
b. Encouragement of efforts to eliminate prostitution.
c. Provision of supervised medical prophylactic facilities for men exposed to disease.
d. Thorough treatment of disease acquired.
e. Punishment for failure to use prophylaxis after exposure.

3. Continence can best be encouraged by creating a strong community sanction for clean and healthy living. Positive agencies to promote continence are—

a. Active military training.
b. Effective educational, vocational, and moral training.
c. Healthy recreation in the camp, with special emphasis on athletics.
d. Sound instruction in hygiene.

4. Existing courses in hygiene in the school system of the Army include the subject of sex hygiene. Lectures on this subject have regularly been given to the soldiers of the Army by medical officers on duty with troops. Sex morality will be presented to the Army in a positive form and not alone in its aspect of venereal disease prevention. Commanding officers will, using the agencies available, establish a course in sex morality which will be given to all officers below field rank and to all enlisted men. * * *

5. When vice conditions in neighboring communities appear to have an unfavorable influence upon his command, the commanding officer will request the civil authorities to initiate action to better them, and will avail himself of the good offices of representatives of nonmilitary organizations in his vicinity which are working for that object. Houses of prostitution accessible to members of the command will be declared "Off limits" by commanding officers.

* * * * * * *

7. For every post, camp, or station there will be compiled each week as of Friday night, a report of venereal disease in the form shown below, setting forth information thereon in regard to each regiment or other separate organization in the command. The commanding officer will send copies of it to organization commanders under him, calling for explanations from those whose organizations show high rates. This report will then be transmitted by the commanding officer to the next higher commander with explanatory remarks relating to annual incidence rates above 100, statements of corrective measures taken, and other matters of interest relating to the subject.

* * * * * * *

The specific recognition given the United States Interdepartmental Social Hygiene Board by the War Department in this order was of the greatest value in extending the usefulness of that board by assuring a more complete cooperation on the part of the Army.

The weekly reports of the incidence of venereal disease infections provided for by paragraph 7 of General Order No. 135 have been compiled with great care by the Division of Venereal Disease Control and show a gratifyingly low rate of infection during the post-war period, which period would be expected to return a rather high incidence of venereal disease. The rates for the balance of the fiscal year, after the inauguration of the system, are given in the following table, so corrected that each item is complete for all stations of the Army within the United States:

Weekly report of the incidence of new cases of venereal disease per thousand men per annum among troops in the United States from the week ending Sept. 5, 1919, to the week ending June 25, 1920.

[Corrected to include all stations.]

Week ending—	Rate.	Week ending—	Rate.
1919.		1920.	
Sept. 5	184.9	Jan. 30	52.5
Sept. 12	153.73	Feb. 6	45.1
Sept. 19	140.8	Feb. 13	53.4
Sept. 26	102.7	Feb. 20	49.7
Oct. 3	87.7	Feb. 27	41.7
Oct. 10	96.1	Mar. 5	42.7
Oct. 17	117.6	Mar. 12	49.6
Oct. 24	84.14	Mar. 19	54.4
Oct. 31	80.98	Mar. 26	51.2
Nov. 7	76.8	Apr. 2	33.7
Nov. 14	87.0	Apr. 9	40.5
Nov. 21	74.9	Apr. 16	59.8
Nov. 28	57.7	Apr. 23	51.2
Dec. 5	73.6	Apr. 30	46.5
Dec. 12	80.3	May 7	41.2
Dec. 19	85.5	May 14	51.9
Dec. 26	47.0	May 21	49.0
		May 28	42.3
1920.		June 4	39.2
Jan. 2	59.9	June 11	36.8
Jan. 9	78.1	June 18	53.4
Jan. 16	74.1	June 25	38.8
Jan. 23	61.8		

The figures given above do not agree entirely with the permanent statistics of this office for the latter half of the calendar year 1919, which show admission rates per 1,000 for venereal diseases in the United States among all troops (white and colored) as follows:

July	148.59	October	111.34
August	135.92	November	91.88
September	129.20	December	83.20

For a variety of reasons, the permanent statistics, based on the official monthly sick and wounded report, are more likely to be accurate than are the current weekly reports, and are also more susceptible of checking in this office with a view to determining completeness or detecting duplications from readmission of the same soldier for the same infection. The general tendency in both sets of figures has been downward since June, 1919. It would not, however, be justifiable to attribute the 1920 decline entirely to the activities following the issuance of General Orders, No. 135, because a

study of all the data available to this office indicates that during the last half of 1919 several other important factors tending to lower the rates were at work, particularly completion of the return of the overseas army, the cessation of demobilization, the reduction in the ratio of colored men in the military forces, and the practical cessation of Negro enlistments in November and December.

In comparison with the preceding figures it is important to remember that the average admission rate for venereal disease in the Army during the five years before the World War was 93.3 per 1,000. It will be of great interest to learn whether the permanent statistics for the calendar year 1920 will approximately confirm the figures shown above in the weekly rates for the period from January to June, 1920, and which have been continuing in July, August, and September, these rates ranging from 35 to 60 admissions per 1,000 and averaging about 50.

A valuable contribution to the knowledge concerning venereal disease conditions in the Army was the study of the circumstances attendant upon the infection of 10,000 soldiers with venereal disease from September 10, 1919, to September 13, 1920. This was based upon separate reports made on each case of such disease detected by a medical officer, each individual report containing the initials, organization, and term of service of the soldier, the diagnosis of the disease by the medical officer, and the voluntary and confidential statements made by the soldier in response to prescribed questions.

Current reports on each 1,000 cases were made from time to time and published to the service. These reports, nine in number (the first report having included 2,000 cases), are combined and classified as follows.

TABLE 89.—*Analysis of the 9 consolidated reports of individual venereal disease reports, Nos. 1 to 10,000, submitted in compliance with Surgeon General's Office Circular Letter No. 293, between Sept. 10, 1919, and Sept. 13, 1920.*

1. Date or period covered	First report, Sept. 10 to Nov. 10, 1919.	Second report, Nov. 11 to Dec. 15, 1919.	Third report, Dec. 16, 1919, to Jan. 20, 1920.	Fourth report, Jan. 21 to Feb. 26, 1920.	Fifth report, Feb. 27 to Apr. 7, 1920.	Sixth report, Apr. 8 to May 17, 1920.	Seventh report, May 18 to June 23, 1920.	Eighth report, June 24 to Aug. 7, 1920.	Ninth report, Aug. 8 to Sept. 13, 1920.	All reports, Sept. 10, 1919, to Sept. 13, 1920.
2. Length of period covered, days	62	35	36	37	41	40	37	45	37	370
3. Number of individual cases reported in the period	2,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	10,000
4. Average length of service, months	27.0	28.15	26.75	27.0	24.7	27.7	25.0	24.0	20.5	25.94
5. Percentage of cases of gonorrhea	66.0	64.5	66.8	63.5	64.7	67.2	65.3	66.0	67.3	65.83
6. Percentage of cases of chancroid	14.0	19.2	20.0	25.3	23.2	22.4	26.5	23.5	22.7	21.15
7. Percentage of cases of syphilis	20.0	16.3	13.2	11.2	12.1	10.4	8.2	10.5	10.0	13.02
8. Percentage of cases of disease contracted near station of soldier	45.7	48.0	52.8	69.1	76.3	70.6	68.5	73.0	65.3	61.7
9. Percentage of cases contracted at a distance from station of soldier	54.3	27.4	30.6	21.9	16.3	18.3	12.0	18.8	30.6	28.19
10. Percentage of cases contracted outside of United States and possessions		24.6	16.6	9.0	7.4	11.1	19.5	8.2	4.1	10.11
11. Percentage of cases of disease contracted in a house of prostitution	23.18	21.6	28.46	29.11	33.6	38.2	43.4	37.1	36.3	31.51
12. Average time elapsing between the date of the infecting intercourse and the date of the detection of the disease by the military authorities, days	17.0	16.9	17.7	18.17	18.5	23.1	15.7	15.8	10.9	17.18
13. Percentage of cases of disease in which the use of alcoholic liquor was admitted by the soldier prior to, or at the time of, the infecting intercourse	15.0	17.3	16.87	14.43	13.4	14.6	20.5	17.3	17.0	16.2
14. Percentage of cases of disease in which the soldier was solicited by the woman	34.68	32.8	30.0	27.5	29.4	29.8	28.9	32.0	29.2	30.9
15. Percentage of soldiers infected who took prophylaxis after exposure	53.0	52.7	45.66	43.71	42.0	47.6	53.0	47.0	42.0	46.9
16. Average time from first exposure to use of prophylaxis; hours, minutes	2h. 30m.	2h. 15m.	2h. 15m.	1h. 53m.	2h. 15m.	2h. 6m.	1h. 56m.	1h. 57m.	1h. 59m.	2h. 10m.
17. Number of men who admitted staying all night with the woman	351	161	188	153	186	152	134	109	120	1,554
18. Percentage of soldiers who paid nothing for the infecting intercourse	47.0	42.9	42.1	39.0	38.6	37.2	29.1	33.5	33.8	39.09
19. Average price of intercourse when payment was made	$3.22	$3.20	$3.14	$2.88	$3.02	$3.17	$2.93	$2.94	$3.20	$3.10
20. Percentage of soldiers infected who admitted prior instruction by the military authorities as to the danger of contracting venereal disease	85.9	89.3	86.85	89.3	88.4	91.3	93.4	91.8	85.5	88.82
21. Average number of exposures during year for the men who answered question	15.5	13.7	15.13	13.9	13.3	15.1	16.8	14.0	21.0	15.32
22. Average number of exposures without prophylaxis for each case of disease following neglect of prophylaxis	10.4	11.3	12.7	11.1	11.7	11.5	13.3	11.7	16.0	12.13
23. Average number of exposures followed by prophylaxis for each case of disease following the use of prophylaxis	14.2	14.2	17.6	16.5	15.6	19.3	20.0	16.1	19.0	16.46
24. Percentage of cases in which efforts were made by the Army authorities to remove the source of infection	15.2	6.0	8.5	10.9	19.2	14.4	15.3	12.6	10.3	12.76

The loci of the 10,000 infections were noted and published in the series of nine current reports to the service. A comparison of the number of infections incurred at the principal cities within the United States will be of interest and follows. It should be noted that the number of infections is largely determined by the proximity of the city to large aggregations of troops in camp, and that the figures are not in any sense an index of the vice conditions existing within the city.

Loci of infections in 10,000 cases.

City.	Number.	City.	Number.
Asheville, N. C	51	Little Rock, Ark	136
Atlanta, Ga	326	Los Angeles, Calif	31
Baltimore, Md	236	Louisville, Ky	219
Battle Creek, Mich	24	Leavenworth, Kans	30
Birmingham, Ala	29	Memphis, Tenn	14
Boston, Mass	23	Montgomery, Ala	25
Brooklyn, N. Y	15	Nashville, Tenn	21
Brownsville, Tex	18	Newark, N. J	17
Buffalo, N. Y	15	New Orleans, La	57
Burlington, Vt	19	Newport News, Va	100
Chattanooga, Tenn	99	New York, N. Y	161
Chicago, Ill	86	Niagara Falls, N. Y	20
Chillicothe, Ohio	12	Nogales, Ariz	85
Cincinnati, Ohio	48	Norfolk, Va	38
Cleveland, Ohio	15	Oklahoma City, Okla	24
Columbia, S. C	44	Omaha, Nebr	73
Columbus, Ga	196	Pensacola, Fla	13
Columbus, Ohio	58	Petersburg, Va	53
Denver, Colo	112	Philadelphia, Pa	64
Des Moines, Iowa	88	Pittsburgh, Pa	15
Detroit, Mich	22	St. Louis, Mo	179
El Paso, Tex	207	San Antonio, Tex	456
Galveston, Tex	36	San Francisco, Calif	138
Indianapolis, Ind	27	Seattle, Wash	20
Joplin, Mo	20	Spokane, Wash	21
Kansas City, Mo	80	Tacoma, Wash	23
Knoxville, Tenn	34	Toledo, Ohio	11
Laredo, Tex	49	Trenton, N. J	24
Lawton, Okla	66	Washington, D. C	70

A further interesting and voluable study of venereal conditions in the Army was made by the Division on Venereal Disease Control. A questionnaire covering the following points was sent out to 37 of the largest camps in the United States on January 9, 1920:

1. Have you had illicit sexual intercourse in the United States during the past year?
2. If so, how many times?
3. Did you always use prophylaxis after such intercourse?
4. If not, how many times did you neglect it?
5. Did you acquire venereal disease during the year?
6. Did it result from intercourse followed by prophylaxis?
7. Did it result from intercourse not followed by prophylaxis?

The study was conducted so that every man who answered was informed of the purpose of the inquiry, and was assured of his freedom to answer or refuse to answer without prejudice, and of the concealment of his identity. By May 25, 1920, 14,444 replies from individual white men had been sent in and accepted for use. The answers, with the exception of a few which were obviously frivolous or inconsistent, *appear* to be true.

It will be noted that the inquiry was confined to the habits of white soldiers in the United States *within a period of one year*. Not all of the bad conduct so reported necessarily occurred while in the military service. About one-third of the men then in the Army had

enlisted since the armistice was signed and had had no previous service; consequently it is probable that a portion of the replies covered periods of civilian life.

It is interesting and somewhat surprising to find that, as shown by the 14,444 replies, the percentage of men who had been chaste for a year, 34 per cent, was the same as a previous similar inquiry in France showed to have been chaste there. This was surprising for the reason that the present Army is the Regular or professional Army, recruiting by voluntary enlistments, and such an army was thought to have a much smaller percentage of chaste men than would an army raised by a general draft.

This inquiry supports the earlier one in indicating that one-third of average white American men of military age are chaste, at least for considerable periods.

Without going into the minute analysis of the replies, which was made with great care and detail by the division, certain general and very illuminating deductions may be mentioned.

The inquiry supports the belief that chastity is the most important factor in producing low rates of venereal disease incidence in the Army. It also supports the belief that chastity is largely influenced by public opinion, and in the Army by the official attitude in regard to it. Section II of General Orders, No. 135, War Department, 1919 (sex morality), reiterates the War Department's attitude as definitely opposed to illicit intercourse, and to all recognition, encouraging, and regulation of prostitution; it directs all officers to support the sound policy outlined, and it calls for such frequent and explicit reports that all surgeons and commanders are continuously informed regarding conditions obtaining within their organizations. Current weekly reports of veneral disease incidence indicate that it is having an excellent effect.

Whether or not prohibition of alcohol will, in general, tend to lessen illicit sexual indulgence is undetermined, but it seems probable that it tends to reduce the liability to venereal disease by making men less reckless as to when and where they indulge, and less apt to seek women known as prostitutes.

The evidence that one-third of unmarried white males of military age are chaste for a considerable period, and that about one-ninth of the unchaste become infected with venereal disease in the course of a year (which means that about 7.4 per cent of the total become infected in a year) make an interesting comparison with the estimate that about 3.22 per cent of *white* men drafted in 1918 had venereal disease. This would indicate that the accumulation of the infections acquired during about five months in civil life were detected at or soon after entry into the service. Although not all infections acquired in that period were detected, it is not improbable that cases of chronic gonorrhea and of syphilis of longer duration than five months made good the discrepancy. Therefore, each investigation is thought to support the findings of the other.

The studies carried out in this country during the last year appear to show that venereal prophylaxis is less effective than it was formerly believed to be, and than was indicated by an earlier inquiry in the American Expeditionary Forces, from which it was estimated that in the American Expeditionary Forces one infection followed 30 exposures without prophylaxis, or 90 exposures with it. By

some it has been claimed and taught that venereal prophylaxis is 99 per cent efficient, because approximately only one exposure out of a hundred was followed by venereal disease after its use. According to the study in the American Expeditionary Forces, only 3⅓ infections per 100 exposures followed without any prophylaxis, and, according to the inquiry carried out in this country during the last year, only 1 in 120. In considering the question of using this study as a measure of the efficacy of prophylaxis it must be borne in mind that the basis of the figures consists of replies from enlisted men which, in many instances, may be inaccurate either intentionally or unintentionally. Many persons consider prophylaxis much more efficacious than is indicated above, some claiming 99.6 per cent of protection when the procedure is very carefully supervised and all exposures occurring more than eight hours before treatment are excluded. Exaggerated claims as to the efficacy of prophylaxis are liable to do some harm by removing from many men the wholesome fear of venereal disease, by giving certain soldiers the idea that illicit intercourse is sanctioned, and by causing others to lose faith in prophylaxis and to cease taking it when they see many of their comrades contract disease after its use. It is very important to have a basis of comparison when trying to estimate the value of prophylactic measures, but further work along this line is necessary before a final conclusion can be reached. At the present time it may safely be said that venereal prophylaxis is not so efficient as to justify any man in assuming any risk of infection and counting upon its use to compensate for his lack of self-control, but is sufficiently effective to warrant its employment in the most thorough manner as a very important part of any campaign directed against venereal disease.

COORDINATION, ORGANIZATION, AND EQUIPMENT DIVISION.

This division was organized in accordance with the office order No. 451, 1919. It was based upon similar organization which was attached to the office of the assistant chief of staff, chief of the fourth section, General Staff, General Headquarters of the American Expeditionary Forces.

Among the more important matters handled were:

1. The preparation and submission to the General Staff of tables of organization of the Army based upon 500,000 men in accordance with the reorganization bill of the War Department.

2. Preparation and submission of tables of organization of sanitary troops and units to be employed; plans for training and mobilization camps for corps and army units; procurement and allocation of personnel; assemblage and disposition of supplies and materials; construction of hospitals and supply depots; priority shipping tables and troop movement schedules; the use of the Veterinary Service; the location of hospitals and evacuation plans, including the acquisition of hospital trains; sanitary survey of an area indicated and preparation therefrom of endemic maps and instruction pamphlet; all this being a study initiated by the War Plans Division of the General Staff under the coordination of the assistant chief of staff. The work consumed eight months.

3. The preparation of equipment tables for sanitary units and detachments, as well as a study of the individual equipment of the sanitary soldier (tables partially complete).

4. A training study for Medical Department personnel at the instance of the training section, War Plans Division of the General Staff.

5. An exhaustive study of personnel and material required for the mobilization of the manhood of the Nation, with the plans for procurement, disposition, and use of same; the preparation of tables giving the rate of induction of personnel in fixed periods with the quantity of certain supplies to be produced to meet the requirements of the periods, with charts; the organization of the Medical Department to meet the situation and its relation to the General Staff and other branches of the War Department; hospitalization and evacuation plans; concentration of supplies in a fixed area to insure distribution to the fronts affected; the use of the Veterinary Service for the plan; and the basic data relating to all subjects affecting the Medical Department; the whole in a large folio for the use of the student body of the General Staff College in connection with the course of 1919–20.

6. The beginning of the revision of Army Regulations under a definite plan as recorded by the War Department.

7. The modification and elimination of certain excessive and lengthy obsolete forms for return and report in use in the Medical Department.

8. An exhaustive study on and the preparation of tables for grades of enlisted men and specialists' ratings for use in meeting the provisions of the reorganization act of June 4, 1920.

9. A study of the motor transport situation at general hospitals, posts, and camps, and recommendation for the amount required in each situation as directed by the War Department.

10. The coordination of all questions relating to educational, recreational, and vocational training in the Medical Department establishments.

11. The preparation of citations for distinguished medical officers of foreign Governments whose services have been of great value to the United States during the World War.

12. The coordination of all matters between the Medical Department and the other branches of the service when the same were not of routine character and required study and conference for their solution.

13. The preparation of instruction pamphlets for the Medical Department in cooperation with other divisions of the Surgeon General's Office.

14. The preparation of a pamphlet monograph on Medical Department operations in the field, for use by students of the General Staff College.

15. The preparation of articles on medical-military matters for publication in professional and lay journals.

16. The preparation and publication of a new hospitalization policy for the Army; method of naming and designating the various hospital units employed.

17. Studies on and action directed toward the reduction of paper work in the Medical Department.

18. Studies on and action directed toward duty classifications of enlisted men of the Medical Department.

19. A study of the availability and an inspection of the Carlisle Barracks as the location of the Medical Department Field Training School.

20. A study of the types of transport suitable to the Medical Department for use as combat wagons.

21. The handling of the mass of odds and ends of correspondence not definitely related to other divisions of the office.

22. The preparation of a training scheme for Medical Department, Reserve Officers' Training Corps units, at certain colleges in accordance with the request of the training section of the General Staff.

23. Numerous conferences with other branches of the service covering a variety of subjects relating to the Medical Department.

HOSPITAL DIVISION.

Hospital Administration Section.

The hospital administration section as it is treated in this report is the successor to, and identical with, the Hospital Division of the Surgeon General's report for the fiscal year 1919; also the duty of the hospital administration section is the same as that of the old Hospital Division and may be briefly indicated as follows: The acquisition of all hospital space required in the United States and the direct administration of those hospitals directly under War Department control, as well as advisory duties in connection with all other hospitals under control of territorial departments.

This section, in order to facilitate its work, was organized and operated in keeping with the work to be performed in the accomplishment of the above object. Functionally, the work fell into four classes, and therefore the following four subsections were organized, viz:

(*a*) Construction subsection.
(*b*) Administrative subsection.
(*c*) Census subsection.
(*d*) Statistical subsection.

They are presented here in the chronological order of their inception, as well as in the order of their importance. Administration can not operate without previous hospital construction; census and distribution of sick can not take place without previous operation of a hospital; and statistics and deductions can not be made without a basis on preceding activity.

The above subsections cover all of the activities of the hospital administration section. The short names given them aim to state the keynote function, but, in fact, many other important activities, allied or subsidiary, are encompassed by the sections; for example:

(*a*) The construction subsection included the necessary liaison with all agencies instrumental in producing hospital space and liaison with the contemplated users (the various divisions of the office); it calculated requirements and expedited construction; it determined and stated the necessity for the leasing of property, and the head of this section was the leasing officer for the Surgeon General; and before the statistical subsection was established this section collected

and compiled data upon which to base future requirements for hospital space; it prepared preliminary plans for hospitals, and, working with the constructing agency of the War Department, carried to plan completion the Medical Department's hospital requirements; it initiated cancellation and abandonment proceedings and expedited their execution.

This subsection is the same as the "Procurement section" of last year's report, the change in name being suggested by the Chief of the Hospital Division.)

(*b*) The administrative subsection, in addition to its signified function of handling the administration of the many hospitals directly under the Surgeon General, handled the executive work of the hospital section, secured hospital trains, hospital cars and unit cars, handled them for the office, and maintained the necessary liaison with The Adjutant General's Office and the ports of embarkation relative to hospital train service. It also undertook the procurement and distribution of Sanitary Corps personnel for the administrative work in hospitals.

(*c*) The census subsection, in addition to tabulating a daily telegraphic census of the number of sick in all hospitals operated by the Surgeon General's Office, manipulated the distribution of sick from the ports of embarkation, handled the subsequent movement of sick between hospitals, with the exception of individual cases, published a weekly table of hospital space thus operated and distributed 300 copies of each tabulation each week to as many offices and individuals, all interested or concerned with the sick.

Naturally there has been a great decrease in the amount of work done in this section during the year. After all, the decrease has not been so much in the amount of work done, but rather there has been a great decrease in the number of patients for whom the work was being done. The administrative overhead in this section, while it has been greatly reduced, is probably not reduced in proportion to the number of patients handled. As great reduction has taken place in the statistical and census subsections. There has been also a very great reduction in the amount of hospital construction. However, the work of the construction subsection has changed from one of construction to one of destruction; that is to say, changed from a service of acquisition to one of cancellation and abandonment. Considerable work has been done, but it was not creative, and therefore nothing stands in evidence. The train service, likewise, after the distribution of the comparatively few thousands returning from the American Expeditionary Forces during the year, was concerned mostly with the movement of sick in bulk from hospitals which were being closed.

The work of the census statistical subsections has been absorbed by the construction and administrative subsections. While the work is as varied as before, the amount is less, and it is done by fewer persons. By this it will be seen that specialism and subdivision have had to give way to general utility and consolidation. The personnel of the section on June 30, 1919, consisted of 18 persons; on June 30, 1920, the number is 5. It will be seen, therefore, from the preceding statements that there has been a great though gradual reduction in the work done by the section; yet in this connection it is desired to point

out that the work still remaining to be done with the sick and wounded resulting from the war, this section still performs an important part.

As organized now, June 30, 1920, the hospital administrative section is merely divided into the subsections of construction and administration.

The statement of the year's work to follow will not be divided and presented under the subsections, but will be treated briefly as a whole under suitable subjects.

STATUS OF HOSPITALIZATION AT THE BEGINNING OF THE PRESENT FISCAL YEAR.

It is well to show the hospital situation as it stood on June 30, 1919, in order that what follows may be more clearly understood. Attention is invited, therefore, to the accompanying table, which shows general, base, and port hospitals operated by this office, which were functioning on that date, giving the occupied, vacant, and total beds of each.

TABLE 90.—*Hospital situation June 30, 1919.*

[Prepared by census section, Hospital Division.]

	Bed situation.			Remarks and capacity.
	Occupied.	Vacant.	Total.	
General hospitals.				
Army and Navy, Hot Springs, Ark	211	55	266	
Fort Bayard, N. Mex	876	124	1,000	
Letterman, San Francisco, Calif	1,584	132	1,716	
Walter Reed, Takoma Park, D. C	1,754	146	1,900	
No. 2, Fort McHenry, Md	2,487	313	2,800	
No. 3, Colonia, N. J	1,331	219	1,550	
No. 4, Fort Porter, N. Y	132	118	250	
No. 5, Fort Ontario, N. Y	821	202	1,023	To be closed Aug. 1.
No. 6, Fort McPherson, Ga	2,160	705	2,865	
No. 7, Roland Park, Md.[1]				
No. 8, Otisville, N. Y	847	153	1,000	
No. 11, Cape May, N. J	464	246	710	To be closed July 20.
No. 12, Biltmore, N. C	326	125	451	
No. 16, New Haven, Conn	441	59	500	To be closed Sept. 1.
No. 19, Oteen, N. C	1,034	266	1,300	
No. 20, Whipple Barracks, Ariz	267	133	400	
No. 21, Denver, Colo	1,364	245	1,609	
No. 24, Parkview, Pa	613	87	700	To be closed July 15.
No. 25, Fort Benjamin Harrison, Ind	630	397	1,027	
No. 26, Fort Des Moines, Iowa	874	186	1,060	
No. 27, Fort Douglas, Utah	456	43	499	To be closed Aug. 1.
No. 28, Fort Sheridan, Ill	3,242	1,058	4,300	
No. 29, Fort Snelling, Minn	913	362	1,275	Do.
No. 30, Plattsburg Barracks, N. Y	749	121	870	Organized capacity, 990.
No. 31, Carlisle, Pa	522	278	800	
No. 36, Detroit, Mich	601	308	909	To be closed Aug. 1.
No. 38, East View, N. Y	536	253	789	To be closed July 15.
No. 41, Fox Hills, S. I., N. Y	1,175	293	1,468	Organized capacity, 1,475.
No. 42, Spartanburg, S. C	569	431	1,000	
No. 43. Hampton, Va	1,164	0	1,164	Organized capacity, 1,000.
Total	28,143	7,058	35,201	
Base hospitals.				
Bowie, Tex	140	610	750	To be made camp hospital.
Devens, Mass	304	896	1,200	Do.
Dix, N. J	808	392	1,200	Organized capacity, 1,200.

[1] Being operated as reconstruction school for the blind.

TABLE 90.—*Hospital situation June 30, 1919*—Continued.

	Bed situation.			Remarks.
	Occupied.	Vacant.	Total.	
Base hospitals—Continued.				
Dodge, Iowa	314	586	900	Organized capacity, 1,000.
Gordon, Ga	96	404	500	Organized capaicty, 500.
Grant, Ill	400	800	1,200	Organized capacity, 1,200.
Jackson, S. C	327	673	1,000	Organized capacity, 1,000.
Lee, Va	355	645	1,000	To be made camp hospital.
Lewis, Wash	391	359	750	Organized capacity, 750.
Meade, Md	471	729	1,200	Organized capacity, 1,200.
Pike, Ark	416	334	750	Organized capacity, 750.
Riley, Fort, Kans.[2]	722	478	1,200	Organized capacity, 1,200.
Sam Houston, Fort, Tex.[2]	1,167	48	1,215	Do.
Shelby, Miss	119	381	500	To be made camp hospital.
Sherman, Ohio	599	881	1,480	Organized capacity, 1,583.
Taylor, Ky	544	456	1,000	To be made camp hospital.
Upton, L. I., N. Y	713	87	800	Organized capacity, 800.
Total	7,886	8,759	16,645	
Hospitals under port of embarkation, Hoboken, N. J.				
General Hospital No. 1, Williamsbridge, N. Y	638	352	990	
Base hospital, Camp Merritt, N. J	1,569	330	1,899	
Base hospital, Camp Mills, L. I., N. Y	230	770	1,000	
Embarkation Hospital No. 1 (St. Mary's), Hoboken, N. J.	515	135	650	
Embarkation Hospital No. 4 (Polyclinic), New York, N. Y.	238	136	374	
Debarkation Hospital No. 1, Ellis Island, N.Y.	29	551	580	
Debarkation Hospital No. 3 (Greenhut Building), New York, N. Y.	598	2,780	3,378	
Total	3,817	5,054	8,871	
Hospitals under port of embarkation, Newport News, Va.				
Base hospital, Camp Stuart, Va	950	2,294	3,244	
RECAPITULATION.				
General hospitals	28,143	7,058	35,201	
Base hospitals	7,886	8,759	16,645	
Port of embarkation, Hoboken, N. J	3,817	5,054	8,871	
Port of embarkation, Newport News, Va	950	2,294	3,244	
Grand total	40,796	23,165	63,961	

[2] Hospital treats overseas cases.

REMARKS.—Hereafter the base hospitals at the camps and cantonments will be omitted from this report, these hospitals being materially reduced in size and caring for the sick of their respective commands only. They are in fact, camp or station hospitals and should be so considered.

In order that proper appreciation may be gained of the amount of work accomplished in the hospitals throughout the country during the year, and in order that comparison may be made with the scope of the work one year earlier, the table of the hospital situation on June 30, 1920, is introduced at this point.

TABLE 91.—*General hospitals, June 30, 1920.*

Hospitals caring for oversea patients and others requiring general hospital treatment.	Bed situation.			Authorized capacity
	Occupied.	Vacant.	Total.	
Army and Navy General Hospital, Hot Springs, Ark...	67	133	200	200
Fitzsimons General Hospital, Denver, Colo.....	688	512	1,200	1,200
Hoff General Hospital, Staten Island, N. Y.....	556	194	750	750
Lawson General Hospital, Atlanta, Ga.....	379	221	600	600
Letterman General Hospital, San Francisco.....	548	202	750	750
Lovell General Hospital, Fort Sheridan, Ill.....	808	192	1,000	1,000
O'Reilly General Hospital, Oteen, N. C.[1].....	442	58	500	500
Walter Reed General Hospital, Takoma Park, D. C....	1,265	235	1,500	1,500
Base hospital, Fort Sam Houston, Tex.....	330	270	600	600
Total.....	5,083	2,017	7,100	7,100

[1] Biltmore railroad station.

There were 40,796 sick in the larger hospitals alone on June 30, 1919, and, not considering the sick sent to them from the smaller United States hospitals, 12,000 American Expeditionary Forces cases were added, making 52,796 patients (mostly American Expeditionary Forces cases) treated during the year. On June 30, 1920, there remain but 5,082 sick in these hospitals, only 2,000 of which are American Expeditionary Forces cases. It will be seen, therefore, that approximately 50,000 cases have received definitive treatment in our larger hospitals and have been released from military hospital control. Of course, this number is not as great as was the number thus handled the preceding year, but it is believed that the majority of this year's cases were of a graver or of a more chronic character than was the average run of American Expeditionary Forces cases for the year previous.

APPROPRIATIONS.

The hospital section approves for the Surgeon General's Office the use of funds from the appropriation, "Construction and repair of hospitals." This section consolidates the requirements and prepares the estimates (so far as any estimate is made by this office) for forming the basis of appropriations to be sought from Congress. After this money has been secured and approval given by this section for its expenditure, the Construction Division expends and accounts for these funds. This office, so far as construction and repair of hospitals is concerned, is not an accounting office and has neither the responsibility nor the opportunity to keep books on the disbursement of this appropriation. The hospital section, however, through liaison and reports from the Construction Division, War Department, does keep not only a correct record of its own approvals, but a record of the allotments made by the above division, and by this method is constantly aware of the condition of the appropriation. It is never necessary for this office to know to a dollar how the appropriation stands, but it is necessary to know within reasonable limits the condition of the fund with which it operates.

The sum of $5,000,000, construction and repair of hospitals, was secured from Congress for the present fiscal year and this money was either expended or obligated during this period. None of this money was appropriated by Congress for specifically designated new

construction projects. Some new construction, nevertheless, was secured, as will be seen later in this report.

At the beginning of the fiscal year this section recommended, in order to facilitate the handling of the appropriation, that the $5,000,000 be divided for use as follows: $750,000 to be assigned for leasing and rentals; $800,000 to be held out for reserve or sinking fund; $3,450,000, or the entire balance remaining, to be used for new construction and for repairs, of which 45 per cent, or $1,552,500, was to be for new construction, and 55 per cent, or $1,897,500, was to be for repair.

This, however, was modified, so that $1,600,000 was set aside for leases; $800,000 for reserve or sinking fund, leaving $2,600,000 for new construction and for repair, and dividing it on the percentage basis as before, apportioned $1,170,000 for new construction and $1,430,000 for repair.

Effort was made by this section to prevent the setting aside of such a large sum for leasing purposes. It was felt that $1,600,000 was a larger sum than necessary to hold for this purpose. It was believed that the estimate of $750,000 made by this section would cover this work. Events proved the latter estimate to be correct. In the meantime, however, with the feeling that considerable of the money set aside for leases would be available at the end of the year for construction purposes, every effort was made to shape events to this end; also every effort was made to keep expenditures within the several apportionments mentioned above so that a saving might be accomplished and thus allow the realization of some desirable construction projects late in the fiscal year. While it was the desire and the effort of this section to provide necessary repair and construction work throughout the year, it was likewise the constant hope and endeavor to save, if possible, some money for really worth while work of as permanent character as possible.

Savings were effected under the above apportionments and, under leasing alone, three-fourths of a million was recovered and turned over to construction activities. These savings made possible a number of construction and improvement projects, the most notable of which were (1) a general hospital for the El Paso region, and (2) $200,000 for department surgeons.

It should be noted here that the Congress, while it did not appropriate money specifically for the construction of the hospital at El Paso, was not averse to such a project should money by any chance be found to be available during the fiscal year.

With reference to the succeeding fiscal year, 1921, the sum of $1,594,000 was secured from Congress, $1,000,000 to be used for small construction projects of under $30,000 and repair work in general, $500,000 to be used for the initial construction of the Army Medical School, and $94,000 for the construction of wards at the Letterman General Hospital. Money was specifically requested for certain other projects, but the reductions in the amounts requested which were imposed by the Secretary of War and by Congress forced the elimination of certain projects.

During this year efforts were made to have Congress remove the restriction upon the use of construction and repair of hospital funds. There still remains a prohibition preventing the Secretary of War from spending over $30,000 in the construction of a hospital building

without specific permission from Congress. No doubt there was a time when this legislation was not only wise but applicable. To-day the legislation is not at all applicable; it should be changed to about $70,000, construction costs having increased a little more than 100 per cent. Moreover, the manipulation of the funds under the various appropriations concerned is different than it was when the legislation was originally enacted, and $70,000 or $75,000 is the only workable figure.

ACQUISITION BY CONSTRUCTION.

Compared with the work done during the period of the war, this part of the work is negligible. However, during the year $5,000,000 have been spent or obligated for hospitals and accessory buildings. Roughly, the new construction accomplished—and by new construction is meant entire new hospitals or wholly new buildings—has amounted to practically $2,000,000. Three-quarters of a million has been used for leases, rentals and damages connected therewith. A quarter of a million was required to cover the annual estimates for repairs presented by hospitals throughout the United States and its possessions. The remaining $2,000,000 was used for miscellaneous projects, partly new construction and partly repair, etc.

Under the heading of new construction mentioned above, it is desired to enumerate only a few of the more important projects completed or put under way this year as follows:

At Walter Reed General Hospital, for boiler, alteration of steam distribution system, 10-ton incinerator, roads, miscellaneous work, etc	$270,000
At the Army and Navy General Hospital, Hot Springs, Ark., for improvement of water supply	26,000
At Fort Bliss, Tex., for a new hospital	1,100,000
At the Fitzsimons General Hospital, for officers' and noncommissioned officers' quarters, water supply, improved roadway, coal handling equipment and general hospital improvement, over	500,000
At Letterman General Hospital, for increasing the water supply	23,000

There have been other items of importance under the subject of construction work, but they can not be classed as definite construction projects. It should be mentioned that in addition to caring for the annual estimates which ordinarily cover the year's needs at the stations under territorial departments, additional hospital construction and repair money was sent out this year to be spent under the direction of the department commanders. It was determined in April that sufficient saving had been made to make possible a distribution of a considerable sum of money and that there was sufficient time for the intelligent obligation of this money under the recommendation of the department surgeons. Accordingly, department surgeons were communicated with and $200,000 were distributed on April 22 to the department commanders, as follows:

Northeastern Department	$20,000
Eastern Department	44,000
Southeastern Department	34,000
Southern Department	26,000
Central Department	40,000
Western Department	26,000
Independent stations	6,000
Hawaiian Department	2,000
Panama Department	2,000
Total	200,000

It was desired to construct nurses' quarters at some of the more important stations, but, owing to the increased cost of material and certain other unexpected demands upon the appropriation, this was not possible, except at one post, and for which the approval of $23,000 was secured late on June 30.

ACQUISITION BY PURCHASE.

The purchase of additional land adjoining the Walter Reed General Hospital authorized in the last fiscal year to the extent of $350,000 is under way, and, while progressing slowly, it is hoped that the whole can be purchased this year, or at least sufficient to permit the erection of the first building, the Army Medical School, for which funds have been appropriated. Not only is this additional property necessary for this new building and other new buildings to form a part of the Army Medical School, but a number of residences are situated on these lots and they are badly needed for quarters for officers on duty at this hospital.

ACQUISITION BY LEASES.

There were no new leases made during the year and all property occupied for hospital purposes was secured by renewals of existing leases. Chief among the places renewed and occupied throughout the year are:

(1) Roland Park, Md., previously known as General Hospital No. 7, 3 plots.
(2) O'Reilly General Hospital, N. C., 15 plots.
(3) Fitzsimons General Hospital, Colo., 2 plots (99 year lease at $1 per year).
(4) General Hospital No. 31, Carlisle, Pa. (a portion of), 1 plot.
(5) Hoff General Hospital, Staten Island, N. Y., 23 plots.
(6) Hospital Annex, Columbus, Ga., 1 plot and building.

In addition to the above property leases renewed for hospital purposes throughout the year, a number of leases were renewed for prophylactic stations in cities near the various cantonments.

The great majority of the work of this office in connection with leased properties during the year has been, not with securing new leases or renewing old ones, but with the cancellation of leases and abandonment of properties. In the main, this work has moved along rapidly following the removal of patients from closing hospitals; but in some instances considerable delay has ensued for one reason or another, usually due to the fact that property was not moved promptly from the hospital, thus making it necessary for the Medical Department to pay rent for the additional period during which the hospital was merely a storehouse. Other things being equal, the properties carrying the highest rental were abandoned first, and practically all properties covered by other than nominal leases were under abandonment orders early in the fiscal year.

HOSPITAL TRAINS.

On July 1, 1919, there were on hand and in service four hospital trains of seven cars each. Each train consisted of one kitchen and personnel car, two tourist cars, two bed cars, one officers' car, and one baggage and store car.

Cars Nos. 1 and 3 of hospital train No. 4 were transferred to Camp Eustis, Va., for the use of the Chief of Coast Artillery in preparing an experimental artillery train.

The cars composing these trains are all of wood construction, and because of this are unsuitable for the transportation of sick. Moreover, the railroad authorities will not haul these wooden cars in the same train with steel cars. They were purchased at a time when steel cars were not obtainable and when there existed an immediate need for railroad transportation. Now that the necessity for the further use of these cars no longer exists, recommendation has been made that these cars be disposed of by sale or salvage.

These trains are located as follows: Trains Nos. 1, 3, and 4 at the Army supply base, Brooklyn, N. Y.; train No. 2 at headquarters, Southern Department, San Antonio, Tex.

In addition to the hospital trains listed above there, are on hand June 30, 1920, 20 hospital unit cars which were obtained by purchase in January, 1919. These cars are arranged with Glennan adjustable bunks, large kitchens, and refrigerators, and are used in conjunction with standard sleepers, providing messing facilities for 250 patients each. These cars are of steel underframe construction with anti-telescoping device, and are much superior to the wooden cars composing the four hospital trains listed above. These cars are located as follows: At the Army supply base, Norfolk, Va., cars Nos. 1, 2, 3, 4, 5, 8, 9, and 10; at the Army supply base, Brooklyn, N. Y., cars Nos. 11, 12, 14, 16, and 20; headquarters, Central Department, Chicago, Ill., car No. 6; headquarters, Western Department, San Francisco, cars Nos. 7, 18, and 19; headquarters, Southern Department, San Antonio, Tex., car No. 13; port of embarkation, Hoboken, N. J., cars Nos. 15 and 17.

It is the desire of this section to complete the study of the "unit car" such as was used in the United States during the war, and as a result of this study to plan and recommend any improvement that may be deemed necessary. The experience of the war showed that the unit cars, when properly used in conjunction with Pullmans, provided just as satisfactory hospital train service as did the hospital trains. In addition to doing this, the service was infinitely more economical to operate and maintain, and the initial cost per patient carried or per car or per train unit was much less. A reference to the report of last year under this heading will show how these unit cars operate. Further, it has been decided, after conferences, that there is no reason why the unit cars, supplemented by Pullmans or tourists, could not constitute the entire hospital train service wherever hospital trains are used, even up to the evacuation hospitals. The unit cars have demonstrated a very great flexibility. The single car can accommodate operating personnel, including the feeding, as well as patients, in a satisfactory manner, and the same single car, when operated in conjunction with eight Pullmans or tourist cars, forms a 250-bed hospital train. In addition to the fact that the hospital trains now in the service are of wood construction, and therefore dangerous, the experience of the war went far toward proving that the Pullman car forms a very satisfactory ward car for ordinary sick, provided that it is accompanied by the necessary proportion of properly constructed and operated "unit cars."

The controversy between all-steel cars and cars with steel underframes and antitelescoping device and possibly steel outer siding still exists. It seems probable that all-steel cars have been overadvertised and that the public has been educated to the feeling that none but all-steel cars are fit to travel in; the public, therefore, demands all-steel cars. It is probable that steel under-frame cars with antitelescoping device are as safe as all-steel cars; they are certainly more comfortable for either sick or well. They are cooler in summer and warmer in winter; they are more easily altered and more easily decorated.

AMERICAN EXPEDITIONARY FORCES SICK AND WOUNDED.

During the fiscal year, July 1, 1919, to June 30, 1920, only 12,099 patients were received from the American Expeditionary Forces as follows: July, 4,739; August, 2,175; September, 1,305; October, 1,726; November, 1,623; December, 198; January, 152; February, 60; March, 7; April, 86; May, 22; June, none. These patients were distributed from the ports of embarkation, Hoboken, N. J., and Newport News, Va., to the various general hosptials.

From the above it will be observed that the movement of the sick by train from the port hospitals to the general hospitals in the interior was not comparable in importance with that of the preceding year, when over 130,000 were thus distributed and some 30,000 additional were moved between the general hospitals.

In addition to handling the above distribution, the unit cars particularly, and in a few instances the hospital trains, were put to use upon the abandonment of general hospitals when they were called upon to move in a body the remaining sick requiring further treatment in other and more permanent hospitals.

DEMOBILIZATION AND ABANDONMENT OF GENERAL HOSPITALS

The demobilization of the base hospitals at the camps and cantonments had been completed before July 1, 1919. It will be remembered that for some time they had assisted in general hospital work. After July 1 they were to be camp hospitals only, and were therefore placed under the camp surgeon locally, and with reference to this office their administration was taken over by the Division of Sanitation.

In June there were many requests from within as well as from without this office for estimates on the number of sick that would be remaining in general hospitals each month throughout the ensuing fiscal year, and for the number which would probably remain in general hospitals on June 30, 1920. In making this estimate there were many factors to be considered, chief among which were, first, the uncertainty with reference to the number of sick yet to be returned from the American Expeditionary Forces, and, second, the varying decisions with reference to when patients would be discharged from military hospitals and taken up by other agencies. Moreover, it was necessary to estimate more or less accurately, for upon this estimate appropriations must be based and defended. Such an estimate was made and later was laid out on a chart (see fig. 46). The full, unbroken line indicates the estimate referred to. On this chart also

has been inserted, week by week as time passed, the beds available and the actual sick present in general hospitals. On an examination of this chart it will be seen that the estimate, while practically correct, was high in the early months, but this was largely an intentional factor of safety inserted to cover the uncertainty of the speed with which the sick remaining in the American Expeditionary Forces were to be returned. The estimate of the number of sick which would be remaining June 30, 1920, was correct almost to a man. This chart covers a portion of the preceding fiscal year in order to lead up logically to the year in question; also it is carried one month beyond the present fiscal year. It will be observed that there was always space for the sick, although the excess space, as shown between the broken lines on the chart, was kept to the minimum. This constituted a continuous problem of great interest, for abandonments had to be determined upon at least a month in advance and some of them three months in advance, and once under way, could not be revoked without causing great confusion.

In order to bring together on one table certain information with reference to not only the status of hospitals, but their dates of abandonment, etc., a table has been prepared (see Table 92). This is a comparative one showing all hospitals administered during the year from this office direct, and through the ports of embarkation, giving their capacity and occupancy, date of discontinuance, and to whom turned over. In the two columns headed "Status June 30, 1920," those hospitals which still remained active on that date are carried through and their present capacity and occupancy are shown.

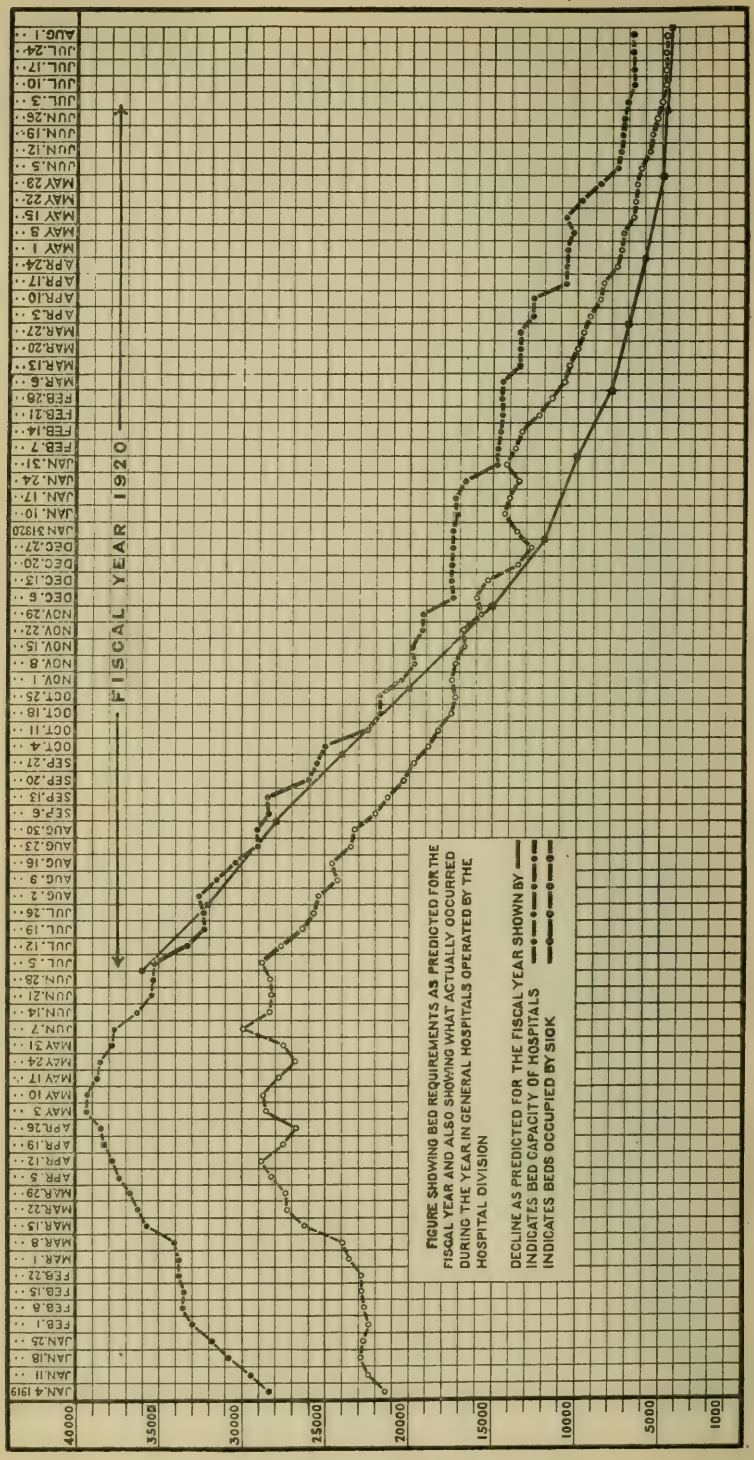

FISCAL YEAR 1920
FIGURE SHOWING BED REQUIREMENTS AS PREDICTED FOR THE FISCAL YEAR AND ALSO SHOWING WHAT ACTUALLY OCCURRED DURING THE YEAR IN GENERAL HOSPITALS OPERATED BY THE HOSPITAL DIVISION
DECLINE AS PREDICTED FOR THE FISCAL YEAR SHOWN BY
INDICATES BED CAPACITY OF HOSPITALS
INDICATES BEDS OCCUPIED BY SICK
40000
35000
30000
25000
20000
15000
10000
5000
1000
JAN.4 1919
JAN.11
JAN.18
JAN.25
FEB.1
FEB.8
FEB.15
FEB.22
MAR.1
MAR.8
MAR.15
MAR.22
MAR.29
APR.5
APR.12
APR.19
APR.26
MAY 3
MAY 10
MAY 17
MAY 24
MAY 31
JUN.7
JUN.14
JUN.21
JUN.28
JUL.5
JUL.12
JUL.19
JUL.26
AUG.2
AUG.9
AUG.16
AUG.23
AUG.30
SEP.6
SEP.13
SEP.20
SEP.27
OCT.4
OCT.11
OCT.18
OCT.25
NOV.1
NOV.8
NOV.15
NOV.22
NOV.29
DEC.6
DEC.13
DEC.20
DEC.27
JAN 31920
JAN.10
JAN.17
JAN.24
JAN.31
FEB.7
FEB.14
FEB.21
FEB.28
MAR.6
MAR.13
MAR.20
MAR.27
APR.3
APR.10
APR.17
APR.24
MAY 1
MAY 8
MAY 15
MAY 22
MAY 29
JUN.5
JUN.12
JUN.19
JUN.26
JUL.3
JUL.10
JUL.17
JUL.24
AUG.1

FIG. 46.

TABLE 92.—*Hospitals (comparative table)*

Name.	Status June 30, 1919.		Discontinued.		Status June 30, 1920.	
	Bed capacity.	Patients.	Date discontinued.	Disposition.	Bed capacity.	Patients.
Army and Navy General Hospital, Hot Springs, Ark.	266	211			200	67
Letterman General Hospital, San Francisco, Calif.	1,716	1,584			750	548
Walter Reed General Hospital, Takoma Park, D. C.	1,900	1,754			1,500	1,265
Lawson General Hospital, Fort McPherson, Ga.[1]	2,865	2,160			600	379
O'Reilly General Hospital, Oteen, N. C.[2]	1,300	1,034			500	442
Fitzsimons General Hospital, Denver, Colo.[3]	1,609	1,364			1,200	688
Lovell General Hospital, Fort Sheridan, Ill.[4]	4,300	3,242			1,000	898
Hoff General Hospital, Fox Hills, Staten Island, N. Y.[5]	1,468	1,175			750	556
Station Hospital, Fort Sam Houston, Tex.[6]	1,215	1,167			600	330
General Hospital, Fort Bayard, N. Mex.	1,000	876	June 15, 1920	Transferred to Public Health Service.		
General Hospital No. 2, Fort McHenry, Md.	2,800	2,487	do.	do.		
General Hospital No. 3, Colonia, N. J.	1,550	1,331	Oct. 15, 1919	Restored to owners.		
General Hospital No. 4, Fort Porter, N. Y.	250	132	Nov. 8, 1919	Revert to former status.		
General Hospital No. 5, Fort Ontario, N. Y.	1,000	821	Sept. 3, 1919	do.		
General Hospital No. 8, Otisville, N. Y.	1,000	847	Nov. 15, 1919	Restored to owners.		
General Hospital No. 10, Boston, Mass.	700		July 1, 1919	Transferred to Public Health Service.		
General Hospital No. 11, Cape May, N. J.	710	464	July 20, 1919	Restored to owners.		
General Hospital No. 12, Biltmore, N. C.	451	326	Sept. 1, 1919	Transferred to Public Health Service.		
General Hospital No. 16, New Haven, Conn.	500	441	do.	do.		
General Hospital No. 20, Whipple Barracks, Ariz.	400	267	Feb. 15, 1920	do.		
General Hospital No. 24, Parkview, Pa.	700	613	July 30, 1919	do.		
General Hospital No. 25, Fort Benjamin Harrison, Ind.	1,027	630	Sept. 1, 1919	Revert to former status.		
General Hospital No. 26, Fort Des Moines, Iowa.	1,060	847	Oct. 15, 1919	do.		
General Hospital No. 27, Fort Douglas, Utah.	499	456	Sept. 1, 1919	do.		
General Hospital No. 29, Fort Snelling, Minn.	1,275	913	Aug. 1, 1919	do.		
General Hospital No. 30, Plattsburg Barracks, N. Y.	870	749	Sept. 30, 1919	do.		
General Hospital No. 31, Carlisle, Pa.	890	522	June 30, 1920	Becomes field service school, Medical Department.		
General Hospital No. 36, Detroit, Mich.	909	601	Aug. 10, 1919	Restored to owners.		
General Hospital No. 38, Eastview, N. Y.	789	536	July 15, 1919	do.		
General Hospital No. 42, Spartansburg, S. C.	1,000	569	Oct. 10, 1919	Transferred to Public Health Service.		
General Hospital No. 43, Hampton, Va.	1,164	1,164	Mar. 31, 1920	Restored to owners, Soldiers' Home.		
Total.	37,093	29,283			7,100	5,083

[1] Formerly General Hospital No. 6.
[2] Formerly General Hospital No. 19.
[3] Formerly General Hospital No. 21.
[4] Formerly General Hospital No. 28.
[5] Formerly General Hospital No. 41.
[6] Formerly base hospital, Fort Sam Houston, Tex.

TABLE 92.—*Hospitals (comparative table)*—Continued.

Name.	Status June 30, 1919.		Discontinued.		Status June 30, 1920.	
	Bed capacity.	Patients.	Date discontinued.	Disposition.	Bed capacity.	Patients.
Port of embarkation, Hoboken, N. J.:						
General Hospital No. 1, Williamsbridge, N. Y.	990	638	Oct. 15, 1919	Restored to owners.		
Base Hospital, Camp Merritt, N. J.	1,899	1,569	Dec. 15, 1919	Hospital closed by Medical Department and salvaged with camp.		
Base Hospital, Camp Mills, N. Y.	1,000	230	Sept. 18, 1919	do.		
Embarkation Hospital No. 1 (St. Mary's), Hoboken, N. J.	650	515	Oct. 31, 1919	Restored to owners.		
Embarkation Hospital No. 4 (Polyclinic), New York, N. Y.	374	238	Aug. 15, 1919	Transferred to Public Health Service.		
Debarkation Hospital No. 1, Ellis Island, N. Y.	580	29	June 30, 1919	Returned to Department of Labor.		
Debarkation Hospital No. 3 (Greenhut Building), New York, N. Y.	3,378	598	July 15, 1919	Restored to owners.		
Port of embarkation, Newport News, Va.: Base hospital, Camp Stuart, Va.	3,244	950	Sept. 10, 1919			
Total	12,115	4,767				
Base Hospital, Fort Riley, Kans.	1,200	722	July 22, 1919	Changed to camp hospital, Camp Funston, Kans.		
Base hospitals at camps and cantonments	14,230	5,997		Changed to station hospitals and are now under jurisdiction of departments.	3,577	1,275
RECAPITULATION.						
General hospitals	37,093	29,283			7,100	5,083
Embarkation and debarkation hospitals	12,115	4,767				
Base hospital, Fort Riley, Kans.	1,200	722				
Camps and cantonment hospitals	14,230	5,997			3,577	1,275
Station hospitals					8,260	1,670
Total	64,638	40,769			18,937	8,028

Professional Sections.

INTERNAL MEDICINE.

The activities of the section of internal medicine during the current year have had to do largely with the care and disposition of the tuberculous and neuropsychiatric patients held over from the war, plus the small peace-time increment that became apparent in the military service.

Tuberculosis.—On June 30, 1919, 4,802 cases of pulmonary tuberculosis were undergoing definitive treatment in seven hospitals. A year later 1,069 patients were being cared for in two hospitals. Of the number admitted from overseas during the year, 359 proved not to be cases of manifest or clinical tuberculosis. Four hundred and twenty-five cases with manifest tuberculosis on admission were returned to duty within the year. Over half of the number discharged on certificate of disability were rated as having obtained a maximum amount of improvement.

Patients with tuberculosis were disposed of rather more rapidly than had been anticipated. This was largely due to the enactment of the Sweet Act, which increased the compensation of the discharged disabled soldier two or three fold over his pay on active duty. As a result of the above legislation, previous instructions to retain disabled military personnel until the maximum restoration had been attained, was modified to authorize their discharge after six months of definitive treatment, provided the disability was due to diseases in contradistinction to wounds, and discharge was requested by the individual concerned. This change resulted in practically all patients, except surgical cases, in the status of enlisted men being separated from the military service after six months of treatment. On the other hand, with patients in the status of officers, the situation is entirely different. The officer's active-duty pay exceeds the authorized disability compensation, and consequently, few, if any, officers asked for discharge prior to the attainment of maximum improvement.

The ratio of patients in whom a tentative diagnosis of tuberculosis had been made and in whom manifest or clinical tuberculosis was not corroborated was much smaller than during the previous year. This is believed to be due to the comparatively small number of acute respiratory infections with "residuals" during the current year, as well as to the absence of undue haste in returning patients to the United States from overseas that prevailed for several months after the signing of the armistice.

The discharge of a larger number of patients this year than last who had not attained the maximum amount of improvement was due to the establishment of the policy of authorizing discharges after six months of definitive treatment with a view of promoting morale and contentment, and increased compensation over active-duty pay of enlisted men. Most of the 425 cases returned to duty were men enlisted since the signing of the armistice. A few were officers of the permanent Army. At the end of the fiscal year the incidence of tuberculosis in the Army among those enlisted since the armistice became effective is remarkably low, the rate being about one to a thousand. It is believed that the gratifyingly low incidence of tuberculosis in the Army at the present time is due to two causes; first, a

medical officer well qualified in the art of physical diagnosis has been assigned to duty at each of our recruit depots, where a careful physical examination is made before the men are accepted; second, a large number of our men are living in camps or cantonments where most of the time is spent out of doors and crowding in poorly lighted and imperfectly ventilated barracks is unusual.

Figures now available show that 96,098 men were rejected during the war on account of tuberculosis. This figure includes those rejected by special examiners after arrival in the camp for mobilization, as well as 11,000 cases discharged on certificate of disability with less than three months of service. The total number of cases up to January 1, 1920, admitted to tuberculosis hospitals for definitive treatment was 18,713. Of these 8,717 came from overseas. A diagnosis of clinical tuberculosis was not confirmed in 4,305 cases. The seemingly large number of cases in the above category was unexpected and was apparently brought about by two conditions not anticipated at the beginning of the war. First, the acute respiratory infections in 1918, largely influenza and pneumonia, resulted in a residual chronic pulmonary infection usually caused by hemolytic streptococcus that clinically, even to the physical signs, simulated pulmonary tuberculosis; second, shortly after the signing of the armistice the tuberculosis-hospital centers in France were broken up and a large number of cases were sent home with a tentative diagnosis of tuberculosis that otherwise would have been sifted out overseas. The total number of cases of manifest tuberculosis admitted to tuberculosis hospitals for definitive treatment was 14,408. The number of deaths from the beginning of the war up to January 1, 1920, due to tuberculosis was 1,975.

It is believed that these figures amply justify the measures initiated at the beginning of the war to prevent the acceptance of men with clinical tuberculosis and to hold to service all inclined to evade duty on account of alleged tuberculosis. The results obtained prove conclusively that a comparatively simple and brief physical examination of the chest as devised by Col. Bushnell and employed by a corps of special examiners was eminently successful in obtaining the end sought.

Neuropsychiatry.—As with the tuberculosis section, so with the neuropsychiatric, most of the work during the year pertained to the care and disposition of nervous and mental cases. Although the problems met with were no less difficult in the latter section than in the former, the care and duration of treatment was such that all of the special hospitals organized and operated during the war for the care of neuropsychiatric cases were closed during the year, the last one, General Hospital No. 43, Hampton, Va., March 1, 1920. The inference that all patients were disposed of, however, is not warranted, as all of our general hospitals have a neuropsychiatric service.

On July 1, 1919, there were 2,665 neuropsychiatric patients in general hospitals. Practically all of these were disposed of during the year and the major fraction of an additional 1,000 admitted to hospitals during the year have also been separated from the service. Patients who recovered to the extent that they could be discharged without the probability of injury to themselves or others were separated from the service at the hospital and given transportation to their homes. All other cases were referred to the Bureau of War

Risk Insurance. This bureau usually designated a hospital in the vicinity of the patient's home for definitive treatment after discharge. The individual was transferred to the designated hospital and discharged from the service upon admission to the institution. Thereafter his care and compensation rested entirely with the Bureau of War Risk Insurance.

The policy adopted at the beginning of the fiscal year of returning overseas mental cases to the debarkation port of Newport News and admitting them directly to General Hospital No. 43, Hampton, Va., which hospital was located only a few miles from the transports' anchorage, facilitated greatly the handling of these cases. Efforts were frequently made by the families and friends of patients to have them sent to base or general hospitals in the vicinity of the patient's home. These requests, usually made with the best of intentions on the part of the people concerned, were opposed by the office on the ground that it was impracticable to properly equip all hospitals for the care of irresponsible cases and impossible to man them with qualified and experienced doctors and nurses. The 2,762 cases admitted to General Hospital No. 43 were classified as follows:

Psychosis, dementia praecox	703
Psychosis, undiagnosed	223
Psychosis, manic depressive	266
Psychosis due to drugs and alcohol, including alcoholism	158
Psychosis, with cerebralspinal syphilis	23
Psychosis, with cerebral arteriosclerosis	3
Psychosis, traumatic	9
Psychosis, infectious and exhaustion	6
Psychosis, anxiety	2
Dementia paralytica	2
Constitutional psychopathic states	229
Mental deficiency, moron	298
s ychoneurosis	445
Epilepsy	72
General paralysis of the insane	277
Under observation for mental alienation (no disease found)	6
Nervous diseases, undiagnosed	40
	2,762

Approximately 9,000 neuropsychiatric cases were returned during the war from overseas—just a shade in excess of the number of cases of tuberculosis returned from overseas.

General Hospital No. 30, at Plattsburg Barracks, N. Y., was closed September 30, 1919. This hospital was held for cases of neuroses and psychoses. The plan of segregating these cases adopted the previous year was undoubtedly a wise one.

General Hospital No. 4, Fort Porter, N. Y., while of limited capacity, was excellently administered and manned with an able and experienced staff. Psychiatric cases only were sent to this hospital. It was closed November 8, 1919.

An earnest effort is being made to keep a psychiatrist on the medical examining staff of every recruit depot with a view of rejecting as far as practicable all mentally deficient and perverted applicants. During the past year, eight medical officers with previous neuropsychiatric experience have been detailed for temporary duty at the Disciplinary Barracks, Fort Leavenworth, Kans., in order to become acquainted with and study the misfits and men unable to

adapt themselves to the military service. This action was taken with a view of enabling the medical officers so detailed to become especially proficient in rejecting these undesirables prior to enlistment and of advising the commandants of disciplinary barracks as to the disposition of such cases as are sent to disciplinary barracks for observation or confinement.

A very large majority of all soldiers sent to disciplinary barracks as a result of court-martial are found to have a mental abnormality; mental deficiency and constitutional psychopathic state being particularly common. These classes of individuals comprise most of the misfits in the ordinary walks of life, and who are unable to adjust themselves to their environment unless a special effort is made to ascertain their limitations and temperament.

In times of peace, as well as in times of war, the rejection for service of the tuberculous and neuropsychiatric individual and the prompt detection and care of those accepted who subsequently develop clinical manifestations are two of the most important problems that confront the Medical Department of the Army. It is to be hoped that the lessons and experiences gained during the World War in these fields will not be shortly set aside or easily forgot.

SURGERY.

The Division of Surgery continued to function as a separate division of the office until September 9, 1919, when in the course of post-bellum contraction it was constituted by office order the section of surgery of the Hospital Division. All temporary officers on duty therein were discharged by August 31, 1919, with the exception of two officers of the Sanitary Corps, who were relieved in February, 1920.

The activities of the division have had to do with advice in regard to the surgical cases; professional personnel engaged in surgery and its specialties and undergoing training for this work; surgical supplies and equipment; X-ray activities; and checking up surgical work and efficiency in the service.

The maintenance of the surgical efficiency has depended largely on the personnel detailed to the work, since the equipment at the hospitals has been the best and most complete to be found. The release of large numbers of temporary officers necessitated a constant adjustment of the staffs at the hospitals. The nucleus of regular officers undergoing instruction at Walter Reed Hospital was added to as rapidly as possible, and these specially selected officers were given an intensive course in surgery. The rapid discharge of emergency officers engaged in surgical work necessitated making this course a short one, but the benefit to those taking it and to the service can hardly be over estimated. Surgically qualified officers of the regular corps, after this period of training were detailed to general hospitals, to camp hospitals, and to large posts as necessity required; with few exceptions the surgical work at these stations at the close of the calendar year was being done by such officers instead of by temporary officers.

Much credit is due certain well-qualified surgeons holding temporary commissions, who remained on active duty a long time because of their professional interest in certain groups of cases which they

handled until many of them reached a maximum degree of improvement.

Active clinics in general surgery and its specialties have been maintained at all the general and camp hospitals during the year. There was a very large number of diversified cases in the hospitals at the beginning of 1919, but discharge of these patients was effected rapidly in those instances where a maximum degree of improvement had been attained, and further benefit could not be expected from retention in a military hospital.

When the base hospitals in the cantonments were changed to camp hospitals, practically all overseas cases were transferred to general hospitals. As the number of patients decreased steadily, many general hospitals were discontinued, with the result that during the last few months the dregs of the surgical cases have been concentrated in a few hospitals. These are largely difficult, complicated cases of low-resisting power. Many of them had been subjected to several operations, and careful judgment, and great skill has been required of the staffs in handling them. The close cooperation existing in the hospitals between officers doing surgery, radiographic, and physiotherapeutic work, and fitting orthopedic appliances has insured very gratifying results.

There have been 32,413 surgical operations reported to this office from the stations of the Army during the year. There were 413 deaths on the surgical service, a mortality of 1.27 per cent. This does not represent an operative mortality, however, as many of these deaths occurred in patients not subjected to operation. One hundred and thirty-eight cases of postoperative infection were reported, a rate of four-tenths per cent. Nearly all infections were trivial, of the skin only, and due to staphylococcus.

Amputations.—On June 30, 1919, there were remaining approximately 1,230 cases of this type in the seven general hospitals designated as amputation centers. During the year this class of work was discontinued at General Hospitals No. 3, No. 26, No. 2, and No. 6 in the order named; cases from General Hospital No. 26 were largely transferred to General Hospital No. 28, and the majority from the other hospitals were sent to Walter Reed, where the largest service has been maintained.

At the beginning of the fiscal year 1919 there remained in the two amputation centers, Walter Reed General Hospital and General Hospital No. 3, approximately 955 amputation cases. About 130 cases were added during the year, either from other hospitals or by primary amputation of nonamputation cases. There were 93 cases remaining under treatment on June 30, 1920.

Practically all guillotine stumps received from overseas required reoperation before they were suitable for fitting. The large majority were unhealed and infected. The most persistent and most frequent organism present was the hemolitic streptococcus. In the repair of these stumps bone shortening was limited to the minimum and all bone was treated aperiosteally. Skin closure only was necessary due to the fact that the fascia and muscle was already fixed to the bone end by the fibrous and scar tissue incident to its healing.

All amputations through the foot or ankle where the bases of the metatarsal bones were not preserved, with their muscular attachments, and all Symes were unsatisfactory as weight-bearing stumps.

In such cases a primary amputation through the leg, giving a 7-inch stump, was found much more satisfactory.

Massage of the stump followed by the application of a tightly wrapped bias flannel bandage, with active, passive, and resistant exercises, were begun as soon as the suture line healed and continued until the case was fitted. Classes in stump calisthenics were organized and instructions given both before and after operation to strengthen muscles, mobilize joints, and inprove circulation in the part.

The patient who had lost a limb was fitted with a temporary prosthesis in the appliance shop six weeks after operation, providing healing occurred by primary union. If infection occurred, fitting was necessarily delayed. Each case as fitted joined a class for an hour's instruction in the use of the prosthesis. The average case after three weeks of instruction used his prosthesis exclusively, was able to walk without the aid of a stick, and was ready for his discharge from the hospital. No cases were discharged (except on their own application and these were very few) until they were properly fitted, knew how to use their prosthesis and wear it without pain, and had gained a fair amount of shrinkage—enough to require a refitting. Various types and makes of prosthesis were made and purchases by the Medical Department.

At one amputation center a shop was established and thoroughly equipped for the making and fitting of appliances. The plaster pylon was first used. Later solid thigh and leg buckets were purchased simulating the permanent appliance. Some had ankle and foot motion, others were without ankle motion. All were made of some type of fiber. The type ultimately perfected and adopted was one of one thickness of fiber with knee, foot, and ankle motion, simulating in all respects the permanent appliance. The ankle block and foot were made of willow. These appliances were received from commercial factories, complete, for the thigh and easily adjustable to fit a given stump and ready to receive and hold the bucket for the leg stump.

In the shop the required adjustments are made by trained "leg fitters." The leg is easily shortened, either above or below the knee, by removing the screws that secure the thigh bucket and shin piece to the knee block, sawing off the extra length, and reassembling. Likewise the size of the bucket for the thigh or the leg set-up may be made longer or smaller by removing the copper rivets which hold the fiber together posterially where it overlaps, forming a seam. After the stump has shrunken away from its bucket and a refitting is necessary, the same bucket is made smaller and a new appliance is not necessary.

The leg stumps are fitted with a plaster bucket or cast which is molded to each individual stump. This is placed in a below-knee set-up of fiber, which has been adjusted to hold the bucket and to which has been attached the leather thigh cuff and side bars. As the stump shrinks a new plaster bucket is made or a mold of the stump may be taken and a leather bucket made. Each stump, because of shrinkage, requires two or more fittings before the patient is discharged. The shop at Walter Reed General Hospital fitted 169 stumps during the month of November, 1919, in addition to readjustments and refittings.

Arm and forearm amputations were much less numerous than leg and thigh. The prosthesis in these cases is far less satisfactory than in the lower extremity from a functional standpoint. The patient soon learns to use his remaining hand and arm to do all of his work and in most cases refuses to learn to use his artificial one. Temporary prostheses were supplied. For the arm a molded leather bucket was made in the shop; for the forearm, elbow, and hand, hooks were purchased in quantity lots. In forearm stumps molded leather buckets were made with metal side-bar holding attachments for hand or hook and secured to the arm and shoulder by means of straps and webbing as in the arm stump. The thumb of the hand or the lever on the hook is operated by a strap over the opposite shoulder. The Dorrance hook was found to be the most satisfactory all-round working tool. Fitted cases were detailed for instruction in the use of their appliances in the reconstruction wood shops.

All patients were fitted with appliances except for disarticulations of the shoulder or for partial hand loss where no shrinkage of stumps or instruction in the use of the appliance was necessary.

Roentgenology.—Qualified roentgenologists have been retained in all the general hospitals and large station hospitals throughout the year and the work has been of high order. Special classes of enlisted men have been trained at the Army Medical School as manipulators, dark-room men, and technicians. Stations have been kept reasonably well supplied with these trained men, though with difficulty because of the comparatively low grade of material for training.

Fractures.—Among the 224,089 battle injuries in the American Expeditionary Force there were 25,272 patients with fractures, 2,751 of whom died; 15,165 involved the long bones; humerus, 3,581; femur, 3,401; tibia, 2,310; fibula, 2,568; radius, 2,183; and ulna, 1,122.

Duration of treatment.—One thousand five hundred and thirty patients required 21,946 days of hospital treatment, an average of 14.34 days; 18,004 patients required 3,228,119 days, an average of 179.29 days; 2,987 patients who remained under treatment in hospitals at the end of the fiscal year had required 1,299,345 days, an average of 435 days.

The following facts demonstrate the great improvement which has developed in the treatment of fractures in the World War. In the Civil War there occurred 6,738 fractures of the femur, of which 3,434 died, a mortality of 52.43 per cent; whereas in the World War, of 3,367 femurs, 917 died, a mortality of 27.23 per cent.

Nonunion.—Nine hundred and six cases have thus far been reported as having required operation: Humerus, 164; radius, 178; ulna, 120; radius and ulna, 71; femur, 155; tibia, 132; fibula, 9; and tibia and fibula, 77. Bone grafts were used in 611 cases, Lane plates in 189, sutures and wire in 52, and kangaroo tendon or chromic gut in 54. Grafts were taken from the tibia in 358 cases and in 98 cases a sliding graft was employed. In 25 cases pegs made from beef bone were used, and in 31 cases pieces of rib.

Interval between the injury and the time of operation.—Partial reports have been secured from 570 cases; grafting was performed within 150 days upon 86 cases, between 151 and 200 days upon 104 cases, between 201 and 250 days upon 85 cases, between 251 and 350 days upon 160 cases, and after 351 days upon 135 cases. In a considerable number

of cases there was some slight infection which did not interfere materially with the success of grafting. In some cases in which there was a doubt regarding the completeness of the healing, the two-slip operation was performed; preliminary excision of the scar tissue with replacement by a healthy skin flap, followed after a period of 10 days by the final grafting. Fracture of the graft occurred in several cases, therefore special precautions should be taken to thoroughly support and immobilize the limb. This should not be disturbed for from 6 to 10 weeks. Furthermore, a supporting apparatus should be worn for several weeks longer, especially for the lower extremity.

Because of the extreme curtailment of the clerical force in the Office of the Surgeon General, it has been impossible to follow up and secure reports to determine the amount and duration of disability in these cases. However, through the courtesy of the Bureau of War Risk Insurance —by whose officers these patients have been examined, after recovery has occurred—reports have been obtained which indicate that, in order to secure the best results, sufficient time must be allowed to elapse between the injury and the operation for the complete subsidence of the original infection: that is to say, over, rather than under, 200 days.

Autogenous grafts, taken from the tibia, have proven the most efficient material for bone grafting for the fracture of the long bones on account of its characteristic strength. They are best made with the saw and exact coaptation of the parts of the graft to the respective parts of the host bone must be secured.

While many of these records are as yet too incomplete to give the final end results, yet sufficient evidence has been secured to prove that bone grafting is the most satisfactory method of treatment for nonunion of fractures and that favorable results can be obtained in the largest percentage of cases.

Peripheral nerves.—The patients suffering from peripheral nerve injuries were discharged gradually from the special nerve hospitals, or were transferred when such hospitals were closed. On June 30, 1920, there were remaining only 417 cases. Most of these have suffered extensive wounds, particularly of the bones. The slow healing of the wound or the infection of the bone delayed any attempt at repair of the nerve injury. During the year 840 operations were performed in the different hospitals. The section on surgery of the Hospital Division is continuing the collection of data on these cases and, during the coming year, will issue a report.

Maxillo-facial surgery.—The provisions in force for the care of injuries of the face and jaws made in 1918 have been continued during the past year at the hospitals specially designated as maxillo-facial centers, viz, Walter Reed General Hospital, Takoma Park, D. C.; United States General Hospital No. 2, Fort McHenry, Md.; and station hospital, Jefferson Barracks, Mo. The maxillo-facial cases remaining at Fort McHenry were later transferred to the station hospital, Columbus Barracks, Ohio, and to the Walter Reed General Hospital. The policy of the Surgeon General has been to retain these patients in Army hospitals until the maximum degree of improvement has been obtained. During the year very marked progress has been made in reducing the number of overseas maxillo-facial cases in Army hospitals. On July 1, 1919, there were 374 still

under treatment, whereas on June 30, 1920, but 97 remained. The figures given in previous report as to the number of mandibular fractures requires some revision owing to additional data becoming available. The records show that a total of 445 cases returned from overseas for treatment in the United States. One hundred and twenty-five of these, or 11.1 per cent of the total number of mandibular fractures occurring in the American Expeditionary Forces, resulted in nonunion. Bone grafts have been done on 105 of these cases with gratifying results. Eighty, or 76.2 per cent, are recorded as entirely successful; partial success was obtained in 8, or 7.6 per cent; in 2 the result is still in doubt; while the failures numbered 15, or 14.3 per cent. In practically all of the cases it is expected that reoperation will result in success.

Advances made in plastic surgical methods during the war have made it possible by surgery alone to give at least a presentable appearance to even the worst cases of disfigurement. In practically none has it been considered necessary to resort to the artificial masks rather extensively employed in hospitals of the Allies early in the war.

Very valuable collections of photographs, drawings, wax and plaster models, splints, etc., illustrating cases from beginning to end of the treatment are being prepared at various centers and will eventually form a part of the Army Medical Museum.

PSYCHOLOGY.

The usefulness of psychological classification of personnel demonstrated during the World War has encouraged frequent requests during the past year for this service from military organizations and posts. With rare exceptions it has been impossible to provide psychological examiners, but methods and equipment have been furnished to all military units requesting such assistance. At several posts, psychological examining has been continued and reports have been furnished from which a forecast of certain uses of this service in the reorganized Army may be made. Evaluation of the uses of psychological classification has also continued among civilian agencies where employers, executives, and educators have extensively tried and discussed the Army methods. From the universities in particular there have come a number of researches and revised applications in the use of the Army methods.

Among the lessons learned from these sources, one of the most pertinent relates to the best time for giving the psychological examination. It is generally conceded that the value of a psychological classification decreases as officers become acquainted with their men. It is no less true, however, that the psychological rating may have a distinct and special value during the early days of a recruit's service before his aptitude for the strange life has been demonstrated to his superiors. It would be still more valuable if assignment to a branch of the service were delayed until psychological and other examinations had been completed. A system of psychological examination for all applicants for enlistment would thus aid in the maximum utilization of a recruit's ability in the military organization. Experience in handling the draft indicated that the mental ratings secured after

muster into service often furnished a setting for subsequent questions of inaptitude, lack of mental capacity, improper assignment, and propriety of disciplinary measures. In the interest of economy and efficiency, suitable initial assignment, without trial assignments and subsequent transfers, is desirable. Likewise, rejection is always preferable to discharge.

However, the foremost value of psychological ratings is not to eliminate mental defectives, but to render aid in placing each man where he may render a maximum of service. It is thus desirable that the psychological classification of recruits be completed at the place of enlistment and the rating of each recruit made a part of his service record. Assignment of recruits, if delayed until such records are completed, may then be made in accordance with their capacity to succeed and to make progress. If the assignment is to a special school, the psychological rating will furnish evidence of the progress that may be expected and the kind of courses which may be pursued with profit. Line officers at stations for initial training have found the ratings useful in the formation of training groups in which each recruit may receive instruction and drill according to his capacity to make progress. Finally, a rating of intellectual capacity included in the soldier's record is always available for consideration when questions arise pertaining to advancement, discipline, or any other problem in the handling of men.

One definite step in the direction of this preliminary classification has already been taken in the case of non-English speaking citizens and aliens. The act of June 14, 1920, authorizing the enlistment of such has introduced a new problem in the solution of which the psychological service has demonstrated particular usefulness. At the recruit educational centers where foreigners and illiterates are sent to learn English, the problem of classification has been perplexing, but at Camp Upton psychological classifications have been successfully used to determine in advance the amount of progress which may be expected from these men. By classifying the recruits with respect to the psychological ratings in groups designated for convenience as high, medium, and low, it was demonstrated that graduations from the school could be expected from each group, respectively, in 2, 4, and 6 months. In these groups were men native born but unschooled, foreign born without schooling, and foreign born with schooling only in their native language. Whereas successful classification of such men is impossible by common-sense methods based on conversation, the psychological ratings provide a dependable basis which, in the case of certain men, effects a saving of four months of their enlistment period.

The recruit psychological examination has been devised to determine whether applicants who are non-English speaking or illiterate, have the inherent mental capacity to carry on in the Army. It provides a special method of detecting low-grade men whose ignorance of English makes inapplicable the ordinary methods of estimating intelligence. Its use is limited to general recruiting officers who are thus provided with an objective standard by which they may be held responsible for sending to recruit depots applicants who are mentally incompetent.

There is need for a definite system of psychological examining at recruit depots and other posts where applicants are finally enlisted.

For this work the methods employed during the emergency are available and have been used to a limited extent. But these methods were prepared for and used by professional psychologists, most of whom have now been discharged. They were provided with a number of different scales for measuring mental capacity, from which they were expected to select the one that was best adapted to the experience of the subject to be examined. Attempts to use the methods which were highly successful in the classification of the draft by well organized staffs of specialists in psychology, have led to confusion following the return of these specialists to civil life. Foremost among the prevailing difficulties is the confusion of the different mental scales.

This problem has been contemplated during the past year and preliminary steps have been taken for providing a method appropriate to the conditions of the reorganized Army. There is obvious need for a single group scale of adequate range which may be used alike for literate, illiterate, or non-English speaking recruits. To this end, a revision of methods is now in progress which, it is believed, will provide an intelligence scale which may be successfully administered by any officer who has normal interest in the human problems of the Army. In addition to simplifiying the examining procedure, it is also considered desirable to reduce to a minimum the scoring and recording routine of this revised scale.

Finally, it is essential to the efficiency of this service that responsibility for its administration be definitely established. With appropriate methods developed and prescribed, it is believed the Medical Department provides at the present time the most suitable organization in the Army for the continuance of military psychology. This science demands a personnel with preparation and interests which are probably more closely allied with those of the medical profession than any other existing profession or science represented in the Regular Army. With a limited number of specialists in psychology cooperating with officers of the Medical Department, there should be no difficulty in accomplishing an adequate psychological classification of all recruits. On account of the advanced specialization in this science, it is believed that, for the present, the administration of military psychology in the Medical Department is desirable. Having special methods prescribed, a personnel of specialists in the field is not deemed necessary, provided the work is placed in charge of examiners having such general qualifications as are required of medical officers.

Physical Reconstruction.

On July 1, 1919, 23 hospitals were functioning in physical reconstruction.

During October, 1919, 2 additional general hospitals, viz, General Hospital No. 4, Fort Porter, N. Y., and General Hospital No. 41, Fox Hills, Staten Island, N. Y., were designated to function in reconstruction, thus making a total of 25 hospitals at which the work was carried on.

The greater number of these hospitals having been discontinued during the year, there remained on May 31, 1920, 10 hospitals which were functioning in physical reconstruction.

Of these, the general hospital at Fort Bayard, N. Mex., and General Hospital No. 31, Carlisle, Pa., ceased to function in reconstruction: the former by reason of its approaching discontinuance as an Army hospital on June 15, 1920, the latter on account of being discontinued as a general hospital on June 30, 1920, for the purpose of being converted into a Medical Department Field Service School. Therefore, on July 1, 1920, the work of physical reconstruction will be concentrated in 8 hospitals, viz:

Letterman General Hospital, San Francisco, Calif.
Walter Reed General Hospital, Takoma Park, D. C.
Lawson General Hospital (No. 6), Fort McPherson, Ga.
O'Reilly General Hospital (No. 19), Oteen, N. C.
Fitzsimmons General Hospital (No. 21), Denver, Colo.
Lovell General Hospital (No. 28), Fort Sheridan, Ill.
Hoff General Hospital (No. 41), Fox Hills, Staten Island, N. Y.
Station hospital, Fort Sam Houston, Tex.

Coincident with the reduction in the number of hospitals and patients, there has been a corresponding reduction in the personnel of the reconstruction service. The following table shows the status of the educational personnel and the number of hospitals functioning in physical reconstruction each month from July 1, 1919, to June 30, 1920:

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.
Number of hospitals	23	17	16	15	14	13	13	11	11	12	10	10
Commissioned officers	167	127	106	104	87	82	71	59	59	49	39	37
Enlisted men	375	294	207	131	120	103	68	43	34	55	31	19
Reconstruction aids	978	894	854	837	924	896	819	739	670	591	461	396
Total on staff	1,520	1,315	1,167	1,072	1,131	1,081	958	841	763	695	531	452

The number of patients enrolled in the educational service who took manuel and mental curative work from month to month and the number of hospitals operating in the special month are indicated in the following table:

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.
Number of hospitals reporting	23	17	16	15	14	13	13	11	11	11	10	10
Number of patients enrolled in educational work	20,578	15,944	14,224	14,072	13,598	11,895	11,410	9,780	8,841	7,263	5,979	5,217

The following table shows the number of enrollments in the academic courses from July 1, 1919, to July 1, 1920:

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.
English	3,054	1,559	1,194	1,354	1,280	1,139	1,106	1,037	839	719	583	422
Reading	591	535	388	336	178	165	78	234	121	129	37	27
Spelling	637	533	567	551	395	390	322	324	311	267	178	174
Penmanship	1,131	1,052	943	799	694	506	644	421	390	346	331	203
Geography	82	107	91	96	30	67	108	1	59	3	2	0
History	81	103	58	10	18	67	202	23	22	18	4	15
Arithmetic	1,490	1,440	1,308	1,133	1,093	875	894	771	625	620	410	371
Total	7,066	5,329	4,549	4,279	3,688	3,209	3,354	2,811	2,367	2,102	1,545	1,212

The personnel in the department of physiotherapy of each hospital, the number of patients treated, and the total number of treatments given from July 1, 1919, to July 1, 1920, are indicated in the following table:

	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.
Hospitals with facilities for physiotherapy	28	23	16	14	13	13	13	13	12	12	12	11
Commissioned officers	51	41	27	27	23	23	22	23	23	18	19	16
Enlisted men	116	90	82	72	59	50	44	43	41	37	43	40
Reconstruction aids	558	516	464	433	426	401	379	322	276	241	212	175

Total patients treated	40,706
Total treatments given	2,505,187

As to the desirability and utility of the reconstruction service in large hospitals caring for war patients there would seem to be no doubt. As to the utility of reconstruction service in peace times, it would appear to be particularly a question as to the scope of the work to be undertaken.

The reconstruction service has consisted of educational and vocational activities on the one hand and physiotherapy measures on the other hand. The latter activity is really a part of the treatment of many injuries and diseases and hence is obviously indicated in all general hospitals in peace or war.

Educational activities consist in instruction in any subject usually taught in primary or elementary schools up to high-school standards. In times of peace it is believed this work can be profitably taken over for the few convalescent patients in hospital by the educational and recreational branch of the War Department, which is charged with the duty of teaching similar subjects to the Army as a whole. Vocational training as employed in hospitals includes not only, as its name implies, teaching vocations but also occupational measures—that is, activities that are intended primarily as a means of keeping the individual busy and hence free from ennui and introspection. Thus employed, it becomes not only an occupational activity but likewise a morale and therapeutic measure of considerable importance. In times of peace it is believed that occasion for strictly occupational work will be largely limited to tuberculosis hospitals and on psychiatric services. Under true vocational training a large number of business activities, trades, arts, etc., have been taught. It is obvious that a field for instruction of this kind will continue as long as men grow up without a vocation or desire to learn a new one in order to increase their earning power or because of physical disability a new vocation becomes necessary.

PERSONNEL DIVISION.

Demoblization of Officers and Enlisted Men of the Medical Department.

Discharged during period July 1, 1919, to June 30, 1920.

Medical Corps	11,788
Dental Corps	1,866
Veterinary Corps	664
Sanitary Corps	1,598
Ambulance Service	108
Total	15,908

The early part of the present fiscal year saw the return to the United States of a majority of the officers of the Medical Department who had served with the American Expeditionary Forces. The care of wounded, sick, and disabled of returning soldiers evacuated from hospitals overseas required the continuance of general and base hospitals which necessitated the retention in service of a considerable number of temporary officers who desired discharge and return to civil life. Every effort was made to release temporary officers as rapidly as their services could be spared, but not until October 1, 1919, had the demobilization of troops and the contraction of general hospitals (largely for the care of overseas cases) progressed to the extent which would permit the release of all temporary officers who desired their discharge. The retention of temporary officers (who desired their discharge) was justified in order that the staffs of general hospitals should be sufficient and efficient in all the special branches of medicine and surgery.

The fact that practically all enlisted men of the Medical Department who had enlisted or were drafted for the emergency desired separation from service created a problem which harassed the administration of personnel and the maintenance of efficiency. The Surgeon General was in sympathy with the desire of enlisted men to secure their discharge and return to civilian pursuits, but the demand of enlisted men for discharge was such that had all been separated from service who applied, the postwar work of the Medical Department in the care of wounded and disabled and the work of physical rehabilitation would not have been possible.

The replacement of temporary enlisted men by civilians was considered both inexpedient and inapplicable because of the impracticability of securing a sufficient number of men and the impossibility of securing a class of labor qualified to perform the technical and highly specialized work required of enlisted men in the operation of hospitals and other organizations of the Medical Department. It was therefore determined to concentrate on the assignment of enlisted men to function in the care of sick and disabled, abandoning all efforts to organize and train divisional and other units. With the operation of this policy and the later increase in enlistments by the adoption of one-year periods of service, it become possible to accomplish the separation of all temporary enlisted men who desired discharge by December, 1919.

TABLE 93.—*Number of officers of Medical Department in active service during fiscal year ending June 30, 1920.*

	July 1, 1919.			Sept. 30, 1919.			Jan. 1, 1920.			June 30, 1920.		
	Regular.	Temporary.	Total.	Regular.	Temporary.	Total.	Regular.	Temporary.	Total.	Regular.	Temporary.	Total.
Medical Corps	948	11,783	12,731	891	3,946	4,837	827	1,372	2,199	[1] 786	962	1,748
Dental Corps	218	2,001	2,219	209	564	773	202	167	369	196	126	322
Veterinary Corps	[2] 112	912	1,024	[2] 98	304	402	[2] 94	245	339	[3] 88	195	283
Sanitary Corps	.....	1,817	1,817	.....	835	835	.....	271	271	.....	219	219
Ambulance Service	.....	111	111	.....	29	29	.....	3	3	.....	3	3
Line and staff corps	.....	.....	.....	.....	.....	.....	.....	.....	126	.....	.....	30
Contract surgeons	.....	40	40	.....	37	37	.....	36	36	.....	38	38

[1] Includes 4 retired officers on active duty.
[2] Includes 1 retired officer on active duty.
[3] Includes 2 retired officers on active duty.

TABLE 94.—*Changes in the Regular Medical Corps, Dental Corps, and Veterinary Corps*

REGULAR MEDICAL CORPS.

	Major generals.	Brigadier generals.	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Total.
June 30, 1919	1	2	60	109	349	154	264	939
June 30, 1920	1	2	52	100	361	80	186	782
Losses:								
Deaths				2	3			5
Resignations					15	31	111	157
Retirements			8	7	10	1	2	28
Discharges						1		1
Declinations[1]							16	16
Appointments							50	50

REGULAR DENTAL CORPS.

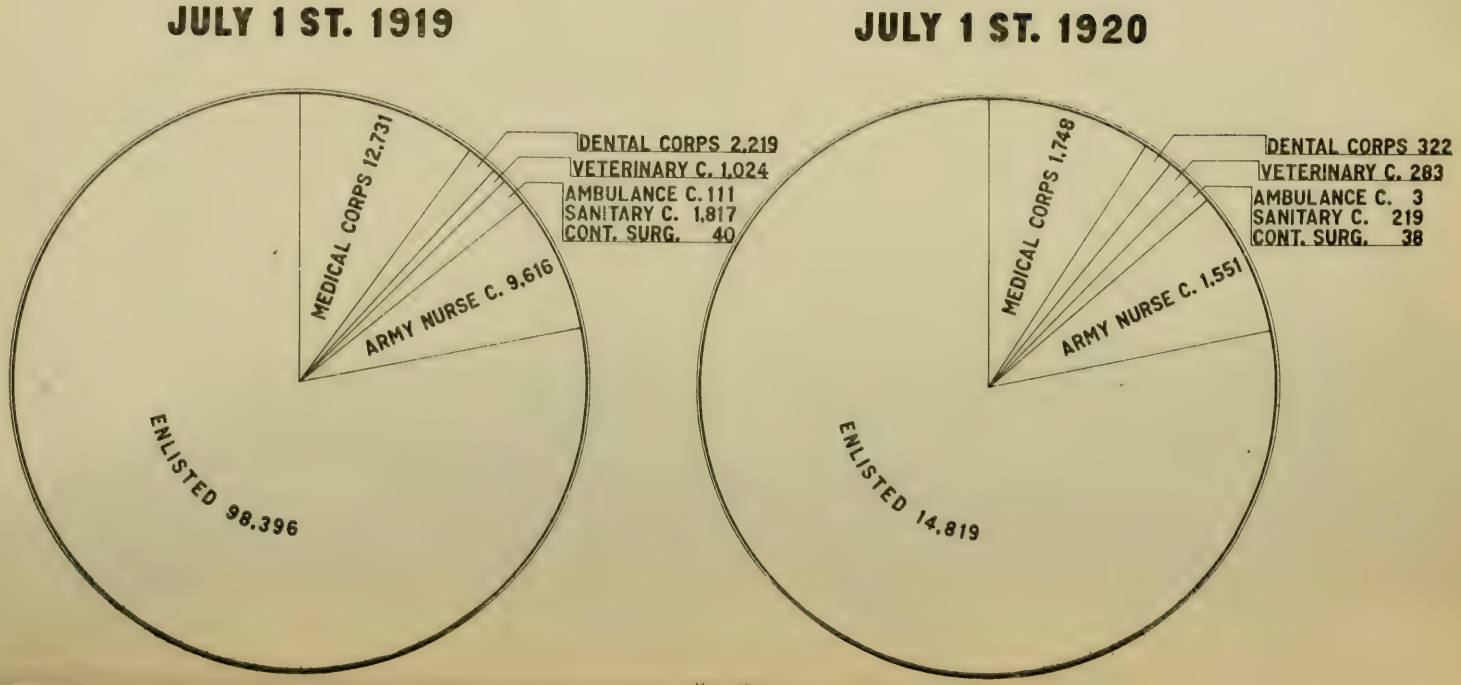
	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Total.
June 30, 1919	9	16	69	77	47	218
June 30, 1920	9	15	65	65	42	196
Losses:						
Resignations			2	11	18	31
Retirements		1	2			3
Declinations[1]					2	2
Appointments					14	14

REGULAR VETERINARY CORPS.

	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.
June 30, 1919	8	17	22	64	111
June 30, 1920	7	16	20	43	86
Losses:					
Resignations			2	19	21
Retirements	1	1	1	1	4
Appointments					0

[1] Qualified candidates for regular corps, erroneously carried as officers of the regular corps, who during the year declined to accept commissions in the Regular Army.

PERSONNEL, MEDICAL DEPARTMENT U.S.A.



Commissioned Personnel, Regular Service.

MEDICAL CORPS.

The following numerical statement shows the number of commissioned officers authorized for the Medical Corps, the number of officers commissioned in all grades, and the number of vacancies existing at the various periods stated:

	Authorized.	Commissioned.	Vacancies.
Sept. 30, 1919	1,551	684	867
Oct. 31, 1919	1,551	820	731
Mar. 31, 1920	1,551	820	731
June 30, 1920	1,551	779	772
July 1, 1920	1,820	779	1,041

During the latter part of the fiscal year, due to a number of conditions, the most important of which was the inadequacy of pay for officers of the Medical Corps, numerous resignations were received. Although several examinations were held during the year to secure available candidates for appointment in the Medical Corps, the number of vacancies progressively increased. The reorganization act provides 1,820 medical officers, which number is barely sufficient to perform the duties and receive the training of the Medical Department under peace conditions. With this number authorized there was on July 1st, 1920, a total of 1,041 vacancies. During the fiscal year 129 candidates were given the preliminary examination for commission in the Medical Corps. Of this number 42 were accepted, 12 were found to be physically disqualified, and 75 were rejected.

The Army Register of July 1, 1902, included the names of 255 medical officers. To July 1, 1920 (18 years), among these officers there were 147 casualties, distributed as follows:

	Per cent.
Retired for disability	58, or 39.45
Reached age limit of 64 years	23, or 15.64
Died	18, or 12.24
Resigned	17, or 11.56
Retired after 30 years' service	9, or 6.12
Discharged, failed for promotion	9, or 6.12
Retired after 62 years of age	6, or 4.08
Retired after more than 40 years' service	3, or 2.04
Retired, failed for lieutenant colonelcy	3, or 2.04
Retired under Panama Canal act	1, or .68
Total	57.64

DENTAL CORPS.

Regulars.—There were 218 officers of the Army Dental Corps on duty July 1, 1919. During the year 1 lieutenant colonel and 2 majors were placed on the retired list because of physical disabilities incident to the service, and 2 majors, 12 captains, and 17 first lieutenants received their commissions. In January, 1920, 14 candidates who had previously qualified for commission were tendered appointments as first lieutenants, 11 of this number accepted the appointment and were commissioned. 2 declined appointment, and 1 case is still pend-

ing. Thus the total loss during the year in personnel of the Regular Dental Corps was 23 officers. There were no promotions made in the Dental Corps during the period of this report. The number of dental officers in the several grades in the Regular Dental Corps are as follows: 9 colonels, 15 lieutenant colonels, 65 majors, 65 captains, and 42 lieutenants.

Temporary officers.—There were approximately 2,000 temporary officers of the Dental Corps on duty July 1, 1919. These officers were discharged as rapidly as the interest of the service would permit. In compliance with special instructions from the Secretary of War, the largest reduction was made during the month of October, 1919. The total number remaining in the service November 1, 1919, was 176; since that date 41 others have been discharged, 8 have vacated their temporary commissions to accept permanent commission in the Regular Dental Corps, and 1, Capt. James E. Cox, died from injuries received in an explosion of a gasoline gas generator, in line of duty, at Columbus Barracks, Ohio, April 11, 1920. There remain on duty at the close of this report 126 temporary officers.

Assignments.—Careful consideration has been given to the equitable assignment of dental officers to meet actual requirements throughout the service. However, the demands for dental service in general hospitals has required the assignment of officers in addition to the authorized quota. During the year dental officers have been on duty in the following localities outside the territorial limits of the United States: England, France, Germany, Poland, Russia, Philippine Islands, Panama, Hawaii, China, Siberia, Alaska, and Porto Rico. At the present date there are 18 on duty in Germany, 1 in Poland, 2 in Porto Rico, 3 in Panama, 19 in the Philippine Islands, 1 in China, 8 in Hawaii, and 272 serving in the United States, as follows:

Northeastern Department	8
Eastern Department	34
Southeastern Department	18
Central Department	30
Southern Department	34
Western Department	26
General hospitals	36
Independent stations	50
Air Service	9
Attending Surgeon's Office, Washington, D. C.	6
Purchase and Storage Division	3
Surgeon General's Office	2
Transport Service	8
Sick in hospital	8

Commissioned Personnel, Reserve Corps.

MEDICAL CORPS.

Due to the consolidation of all forces during the World War and the subsequent discharge of many emergency officers, it has been necessary to build up a new Medical Reserve Corps. Appointments have been limited to former officers serving in the World War and to other applicants to the grade of first lieutenant. The new corps was begun with 537 automatic transfers (officers who had reverted to inactive status before August 7, 1918, or who had never been called to duty). During the year 1919, 4,268 appointments in the Medical

Reserve Corps were made and 623 declined appointment; 2,471 accepted, of which number 6 resigned and 5 died. There were 1,174 cases pending at the close of the year 1919, since which time 524 have declined, 320 have accepted, and 330 are still pending.

At the beginning of the fiscal year 1920 there was a total of 2,997 accepted commissions, distributed in the various grades as follows:

Colonels	49
Lieutenant colonels	135
Majors	591
Captains	1,283
First lieutenants	939

The number in the corps at the beginning of the fiscal year 1920 was further reduced by 133 resignations, 28 discharges, and 9 deaths.

During the fiscal year 1920, 4,090 Medical Reserve Corps officers were appointed and 889 declined appointment; 2,512 accepted and 689 are still pending. Of those who accepted 41 resigned, 3 died, and 4 appointments were terminated. There are now (July 1, 1920), 5,611 officers in the Medical Reserve Corps, distributed in grades and States as follows:

States.	Brigadier generals.	Colonels.	Lieutenant colonels.	Majors.	Captains.	Lieutenants.	Total.
Alabama:							
White		1	2	21	32	13	69
Colored				1	2	6	9
Arizona			1	6	7	2	16
Arkansas:							
White			2	10	28	5	45
Colored						4	4
California:							
White			21	107	100	20	248
Colored					1	1	2
Colorado:							
White		2	12	28	38	10	90
Colored						1	1
Connecticut		2	2	24	22	7	57
Delaware:							
White			1	3	3		7
Colored						1	1
District of Columbia:							
White		4	15	15	10	4	48
Colored				1		10	11
Florida:							
White			2	28	16	4	50
Colored						5	5
Foreign:							
White		2	3	14	24	11	54
Colored						1	1
Georgia:							
White			4	19	43	13	79
Colored					2	7	9
Idaho				11	17	1	29
Illinois:							
White		7	28	148	184	64	431
Colored						18	18
Indiana:							
White		1	8	73	71	10	163
Colored				3		4	7
Iowa:							
White		3	6	55	66	15	145
Colored					1	1	2
Kansas:							
White			2	35	56	13	106
Colored						7	7
Kentucky:							
White		1	7	37	49	13	107
Colored					2	16	18
Louisiana:							
White		1	3	22	23	7	56
Colored					1	7	8
Maine			2	18	17	6	43

States.	Brigadier generals.	Colonels.	Lieutenant colonels.	Majors.	Captains.	Lieutenants.	Total.
Maryland:							
White	2	4	9	21	18	11	65
Colored						2	2
Massachusetts:							
White		8	24	76	91	23	222
Colored						2	2
Michigan:							
White		1	10	55	60	19	145
Colored						1	1
Minnesota		5	8	30	60	21	124
Mississippi:							
White			6	18	20	9	53
Colored						8	8
Missouri:							
White		5	12	66	106	25	214
Colored					1	16	17
Montana			1	20	27	5	53
Nebraska			3	30	40	9	82
Nevada				3	5		8
New Hampshire		1	4	8	22	5	40
New Jersey:							
White			16	42	43	31	132
Colored					1	8	9
New Mexico			2	6	13	7	28
New York:							
White		25	66	172	182	102	547
Colored					1	3	4
North Carolina:							
White		1	3	18	27	10	59
Colored				1	1	14	16
North Dakota				19	23	2	44
Ohio:							
White		2	12	80	107	26	227
Colored					1	3	4
Oklahoma:							
White			4	31	55	13	103
Colored					1	8	9
Oregon			7	34	31	8	80
Pennsylvania:							
White		15	54	161	144	49	423
Colored					2	11	13
Rhode Island			3	15	4	3	25
South Carolina:							
White			4	22	24	5	55
Colored						4	4
South Dakota			2	9	25	4	40
Tennessee:							
White		1	3	41	29	16	90
Colored				1	5	23	29
Texas:							
White		1	4	73	108	21	207
Colored					1	36	37
Utah			1	8	9	10	28
Vermont			2	8	15	1	26
Virginia:							
White		1	4	24	29	14	72
Colored					2	21	23
Washington:							
White			8	40	37	7	92
Colored						1	1
West Virginia:							
White			1	13	35	7	56
Colored					1	4	5
Wisconsin:							
White		1	7	44	59	14	125
Colored						1	1
Wyoming				2	11	2	15
Total white	2	95	401	1,863	2,265	697	5,323
Total colored				7	26	255	288
Grand total	2	95	401	1,870	2,291	952	5,611

During the fiscal year 1920 there were 9 majors, 6 captains, and 1 first lieutenant of the Medical Reserve Corps on active duty. Of this number 9 majors, 5 captains, and 1 first lieutenant are still in active service.

The whole aim in view has been to build up a Reserve Corps that will be effective. The grade offered has been determined by prin-

ciples laid down by a board appointed in the spring of 1919 which was composed of 1 Regular Army medical officer and 5 Medical Reserve officers, guided by the provisions of the appropriation act of July 11, 1919, authorizing the recommissioning of a former officer in the Reserve Corps in the same grade or one grade higher than that held upon discharge. Since June 4, 1920, the provisions of the reorganization act have been the guide for all appointments made. Appointments are temporarily suspended.

The many instances during the war of misplaced medical officers makes a proper classification of personnel one of the necessary initial steps of reorganization. All members of the Medical Reserve Corps are therefore being classified according to specialty, ability, and the qualifying remarks of commanding officers under whom they served. From time to time these data will be modified according to new lines of specialization that the individual officer may undertake, that at all times an effective corps may be maintained.

With the operation of the provisions of the Army reorganization act continuity of policy with reference to the appointment of officers to the Reserve, their training and use in peace and war is established. It is proposed to establish intelligent and continuous communication with the Reserve that the officers of the medical section may be informed of the progress of the medical service of the Army.

The establishment of the school at Carlisle, Pa., provides an institution which will be conducted for the joint purpose of providing training for officers of the Reserve and of the Regular Army.

DENTAL CORPS.

The Dental Reserve Corps was begun with 1,410 automatic transfers (officers who had reverted to inactive status before August 7, 1918, or who had never been called to duty). During the year 1919, 2,383 were appointed, 176 declining appointment; 1,668 accepted commissions, of which number 9 resigned, 2 were discharged, and 5 died. There were 539 cases pending at the beginning of the fiscal year 1920, since which time 165 have declined, 157 accepted, and 217 are still pending. The number accepting was further reduced by 61 resignations, 7 discharges, and 2 deaths.

During this year 1,019 Dental Reserve Corps officers were appointed of which 238 declined appointment, 556 accepted, and 225 are still pending. Of those who accepted 6 resigned. There are now 3,699 officers in the Dental Reserve Corps, distributed in grades and States as follows:

States.	Lieutenant colonels.	Majors.	Captains.	Lieutenants.	Total.
Alabama:					
White			4	19	23
Colored			1	2	3
Arizona		1		4	5
Arkansas			3	16	19
California:					
White	2	5	18	114	139
Colored				2	2
Colorado			7	31	38
Connecticut			9	59	68
Delaware		1	2	5	8
District of Columbia:					
White		2	3	15	20
Colored				3	3

States.	Lieutenant colonels.	Majors.	Captains.	Lieutenants.	Total.
Florida:					
White		2	5	17	24
Colored				2	2
Foreign			3	13	16
Georgia:					
White	1	2	8	41	52
Colored				2	2
Idaho			1	10	11
Illinois:					
White	1	6	23	257	287
Colored			1	3	4
Indiana:					
White	2	4	27	83	116
Colored				1	1
Iowa:					
White	2	2	10	113	127
Colored				1	1
Kansas		1	15	64	80
Kentucky		1	4	42	47
Louisiana:					
White	1	1	3	41	46
Colored				1	1
Maine		1	2	31	34
Maryland			5	30	35
Massachusetts:					
White	1	6	39	207	253
Colored				3	3
Michigan		5	10	77	92
Minnesota	1	2	19	140	162
Mississippi:					
White		3	4	12	19
Colored				1	1
Missouri:					
White	1	4	21	173	199
Colored			1	4	5
Montana			3	17	20
Nebraska			7	60	67
Nevada			1	3	4
New Hampshire		1	2	11	14
New Jersey:					
White		4	19	77	100
Colored				1	1
New Mexico			1	3	4
New York:					
White	2	4	38	419	463
Colored			1	4	5
North Carolina:					
White			3	57	60
Colored				3	3
North Dakota			3	17	20
Ohio:					
White		6	16	139	161
Colored			3	2	5
Oklahoma:					
White		1	5	17	23
Colored				2	2
Oregon			9	36	45
Pennsylvania:					
White	1	6	39	225	271
Colored			2	1	3
Rhode Island		1	7	11	19
South Carolina:					
White		1	3	21	25
Colored				1	1
South Dakota		1	2	27	30
Tennessee:					
White		1	11	28	40
Colored				5	5
Texas:					
White		9	11	67	87
Colored				3	3
Utah		3	1	21	25
Vermont		1	1	6	8
Virginia:					
White		1	2	19	22
Colored				3	3
Washington		2	12	46	60
West Virginia		1	3	32	36
Wisconsin		3	15	92	110
Wyoming			1	5	6
Total	15	95	469	3,120	3,699

VETERINARY CORPS.

On June 30, 1920, 70 officers had declined their appointment and 8 had resigned their commissions. There were 331 officers in the Veterinary Reserve Corps, distributed in grades and States as follows:

States.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.
Alabama		4	3	1	8
Arizona				1	1
Arkansas					0
California	1	1	9	7	18
Colorado		2	6	5	13
Connecticut			1	1	2
Delaware					0
District of Columbia				3	3
Florida				1	1
Foreign				1	1
Georgia				1	1
Idaho		2		1	3
Illinois	1	2	3	10	16
Indiana	1	1	5	6	13
Iowa	1	1	3	18	23
Kansas	1	1	5	7	14
Kentucky		1		3	4
Louisiana		1			1
Maine					0
Maryland			2		2
Massachusetts			6	2	8
Michigan	1	3	2	5	11
Minnesota		3	5	11	19
Mississippi				6	6
Missouri	1		3	9	13
Montana				1	1
Nebraska		1	2	8	11
Nevada					0
New Hampshire					0
New Jersey		1	1		2
New Mexico					0
New York	2	3	6	17	28
North Carolina				5	5
North Dakota		1	1	3	5
Ohio	2	3	8	9	22
Oklahoma			1	2	3
Oregon		2	2		4
Pennsylvania	1	6	8	10	25
Rhode Island					0
South Carolina:					
White					0
Colored				1	1
South Dakota			2	2	4
Tennessee		1		1	2
Texas		3	3	6	12
Utah			1		1
Vermont				3	3
Virginia		1	1	1	3
Washington			1	1	2
West Virginia				1	1
Wisconsin		2	7	5	14
Wyoming				1	1
Total	12	46	97	176	331

QUARTERMASTER CORPS, SANITARY SECTION.

In order to maintain an efficient administrative corps and having no sanitary reserve corps authorized by law, officers who served in the sanitary section of the Medical Department have been commissioned in the Quartermaster Reserve Corps, sanitary section.

To June 30, 1920, 527 appointments had been made; 102 declined and 425 accepted appointment. Of this number 9 have resigned, 2

have been discharged, leaving 413 officers in this corps, distributed in the following grades:

Colonel	1
Lieutenant colonels	2
Majors	18
Captains	120
First lieutenants	144
Second lieutenants	128
Total	413

Army Nurse Corps.

NURSING SERVICE.

The year ending June 30, 1920, has been for the Army Nurse Corps a year of demobilization and adjustment and a year of record completing. At the beginning of the year there were in the corps 9,616 nurses, 7,532 Reserve and 2,048 Regular, with 3,448 of this number overseas. The peak of demobilization was reached in August, 1919, when 2,329 nurses left the service. Since that time the reduction has been steady until on July 1, 1920, there remained in the corps 1,551, including 506 Reserves and 1,045 Regulars. During the year 248 Reserve nurses have been transferred from the Reserve to the Regular Corps, and there have been 110 new appointments to the corps.

The record keeping has presented many difficulties, particularly during the last half of the year, when clerical help has been so greatly reduced. According to a regulation the records of all relieved Reserve nurses must be completed and the original Red Cross papers returned to the office of that organization with a report of their Army service. At the beginning of the fiscal year the records of the nurses relieved in the previous December had not as yet been completed, and the office faced a task of great magnitude in this one activity alone. Nearly 18,000 records, however, have been completed during the year and the papers returned, and within a few months it is expected that it will be possible to keep entirely up to date in this matter.

The completed individual personal histories of each of the 21,480 nurses who were in service are now available with the record of the entire service of each nurse. These histories are constantly referred to for various purposes. All applications of nurses for compensation or for the disability benefits of war-risk insurance and the Federal Board for Vocational Education are confirmed by these records, as are also all claims for the adjustment of pay and allowances, allotment, bonus, loss, etc. Such claims occupy the entire attention of a group of assistants and clerks who deal with all matters involving financial affairs. Because of the return of so many nurses to civil life, frequent references have been made to the personal records for the purpose of recommendations which new employers have requested. The record of Army service has been made a reason for employment in the case of hundreds of nurses, in every sort of nursing activity. The classification of all the nurses remaining in the corps on a basis of special interest and preparation has been accomplished, as has the checking up of all nurses who are not registered in their respective States. Such nurses are being urged to take the necessary examination, and a statement as to their intention in the matter is recorded.

The determination to return to the prewar state of having only registered nurses in the Army Nurse Corps is gradually being brought about.

A recent request of The Adjutant General's Department that lists be prepared showing the enrollment of nurses during the war by States will require many months for compliance.

Since the service records of all nurses are on file only in the Office of the Surgeon General, applications for Victory medals can be approved only in that office. The verification, approval, and forwarding of these applications has been begun, but many months will be required before they all will have been completed. The publicity given to the matter of medals has stirred many hundreds of former members of the corps to request service medals for participation in the Spanish-American War, activities in the Philippines, and on the Mexican border. These applications have been verified, approved, and forwarded as they have come in.

The records of the corps during the World War would supply material for many valuable statistical studies, and it is greatly regretted that the shortage of clerical assistance will prevent or greatly delay the preparation of such studies. A study has been made of the misconduct cases, the total of which, including both serious and minor offenses, amounted to 107. Since the corps numbered 21,480, this figure (107) is considered a very small proportion. One-third were for serious offenses and two-thirds for minor misdemeanors. When the records are available it is hoped to make a report of the disabilities that nurses incurred during their war service. During the year 420 nurses still in the service were admitted to general hospitals as patients. This number, at the end of the year, has been reduced to 91, remaining at Fitzsimons, Walter Reed, Lovell, Hoff, and Letterman Hospitals. Many have been transferred to the care of the United States Public Health Service through the War Risk Bureau.

A number of changes affecting the administration of the Nurse Corps have taken place during the year. On May 18 an act was signed which contains in its provisions authority to increase the pay of the Nurse Corps by 20 per cent. The act was made retroactive to January 1, 1920. The Army reorganization act, which became law June 4, 1920, gives relative rank to the members of the corps in the following words:

> Hereafter the members of the Army Nurse Corps shall have relative rank as follows: The superintendent shall have the relative rank of major; the assistant superintendents, director, and assistant directors, the relative rank of captain; chief nurses, the relative rank of second lieutenant; and as regards medical and sanitary matters and all other work within the line of their professional duties shall have authority in and about military hospitals next after the officers of the Medical Department. The Secretary of War shall make the necessary regulations prescribing the rights and privileges conferred by such relative rank.

At the close of the fiscal year the Secretary of War had not made a statement defining the "rights and privileges." A board, however, convened at the order of the Surgeon General, had prepared recommendations on the subject. Authority has been received to change the street uniform of the Army Nurse Corps from blue to olive drab, and arrangements are in process of completion to issue the newly

authorized garments. This issue, however, will not take place until the present supply of blue articles is exhausted.

There has been a change in administrative personnel of the corps since the last report. The superintendent of the corps was relieved for an extended leave of absence on July 15. Her resignation was accepted December 30, 1919, at which time she was appointed assistant superintendent and stationed at the department surgeon's office, Philippines Department, Manila, P. I. Her decoration by the Secretary of War on November 7, with the distinguished-service medal, was a source of gratification to the members of the corps. The present superintendent of the corps, who had been acting superintendent since shortly after her recall from the position of director of nursing, American Expeditionary Forces, France, early in July, was appointed superintendent on December 31, 1919.

The following report gives the present number and distribution of the members of the corps:

	Regular.	Reserve.	Total.
General hospitals	402	277	679
Department base hospitals	63	18	81
Camp hospitals	201	93	294
Posts, arsenals, recruiting depots, etc	100	30	130
Aviation stations	20	7	27
Miscellaneous stations	52	5	57
Nurses for treatment	29	62	91
Total in United States	867	492	1,359
Philippine Department	84	1	85
Hawaiian Department	30	1	31
American forces in Germany	64	12	76
Grand total	1,045	506	1,551

The following table shows the demobilization of nurses June 27, 1919, to July 2, 1920:

	In service.			Demobilized.
	Regular.	Reserve.	Total.	
1919.				
June 27	2,084	7,532	9,616	
July 25	1,689	5,318	7,007	2,609
Aug. 29	1,421	2,889	4,310	2,697
Sept. 26	1,328	2,344	3,672	638
Oct. 31	1,301	1,716	3,017	655
Nov. 28	1,271	1,457	2,728	289
Dec. 26	1,245	1,229	2,474	254
1920.				
Jan. 30	1,258	1,074	2,332	142
Feb. 27	1,230	963	2,193	139
Mar. 26	1,190	838	2,028	165
Apr. 30	1,136	714	1,850	178
May 28	1,092	604	1,696	154
June 25	1,052	526	1,578	118
July 2	1,045	506	1,551	27
Total				8,065

DIETITIAN SERVICE.

The dietitian service has decreased in size during the year ending June 30, 1920, with the closing of many Army hospitals, but there has been no decrease in the importance attached to this branch of the service. On July 1, 1919, there were in the service 143 dietitians in this country and Hawaii, distributed among 52 hospitals, and 28 overseas or en route to this country. There are now 35 dietitians in the service, 34 in the United States and 1 in Hawaii; 145 have been discharged during the year; 5 of those discharged have requested and received reappointment, and 4 new appointments have been made.

On January 24, 1920, the supervising dietitian on duty in the Office of the Surgeon General left that office. This was due to the fact that no appropriation had been made providing for the salary that goes with this position. The work of the supervising dietitian was then taken over by the Army Nurse Corps, and is still handled in that department.

In April, 1920, an increase in the salary of dietitians was authorized. This increase, which became effective May, 1920, makes the present salary $70 per month, with an additional $5 per month for those serving as head dietitians. Dietitians also receive the congressional bonus of $20 per month.

It is believed that the dietitian service has become firmly established in Army hospitals. In the general hospitals the number of dietitians on duty varies from 4 to 10, according to the number of patients. Not all the station hospitals have a dietitian service, but, in those in which it does exist, there is usually only one assigned to duty. The 35 dietitians in the service at the present time are distributed among 12 hospitals. The demand for dietitians in Army hospitals is indicative of the interest in the subject of food and nutrition and the appreciation of the medical profession for this specialized and technically trained worker.

It is hoped that in the near future plans will be developed by which a reorganization of the various civilian women groups will be brought about. The present unsatisfactory status of the student nurses of the Army School of Nursing, the dietitians, reconstruction aids, technicians, and oral hygienists, all of whom are on a basis of civilian employee in the Medical Department, makes this reorganization urgent. The establishment of the Army School of Nursing upon a permanent basis is a definite need for the development of the school and the future good of the corps. During the coming year especial efforts will be made to use the benefits conferred by the relative rank bill as a lever for raising the whole tone of the corps. New standards of efficiency and conduct will now be expected and demanded.

THE ARMY SCHOOL OF NURSING.

The year ending June 30, 1920, brings the Army School of Nursing to the completion of its second year. It has been a year of concentration in regard to the number of military hospitals where students were on duty, and one of expansion in regard to students sent out

on affiliation. During the year the majority of students have completed their affiliation in gynecology, obstetrics, and pediatrics and a hundred have also completed their course in public health nursing and nursing in mental diseases.

Students have been on duty in the following civilian hospitals for pediatrics, obstetrics, and gynecology:

District of Columbia:
- Columbia Hospital for Women.
- Providence Hospital.
- University Hospital.

California:
- Children's Hospital, San Francisco.
- Lane Memorial Hospital, San Francisco.

Illinois:
- Children's Memorial Hospital, Chicago.
- Chicago Lying-in Hospital.
- Illinois Training School for Nurses, Chicago.
- Michael Reese Hospital, Chicago.

Maryland:
- Johns Hopkins Hospital, Baltimore.
- Hospital for Women of Maryland, Baltimore.
- University Hospital, Baltimore.

Massachusetts:
- Boston Lying-in Hospital.
- Boston Floating Hospital.
- Newton Hospital, Newton Lower Falls.
- Peter Bent Brigham Hospital, Boston.
- Massachusetts General Hospital, Boston.

Minnesota: University Hospital, Minneapolis.

Missouri:
- Barnes Hospital of the Washington University, St. Louis.
- City Hospital, St. Louis.

New York:
- Bellevue Hospital, New York City.
- Brooklyn Hospital, Brooklyn.
- New York Nursery and Child's Hospital, New York City.
- New York Lying-in Hospital, New York City.
- New York Hospital, New York City.
- Post Graduate Hospital, New York City.
- St. Luke's Hospital, New York City.

Pennsylvania:
- Philadelphia General Hospital, Philadelphia.
- Children's Hospital of Philadelphia.
- Presbyterian Hospital, Philadelphia.
- West Philadelphia Hospital for Women.

FOR MENTAL NURSING.

Illinois: Illinois State Hospital, Chicago.
Maryland: Phipp's Clinic, Baltimore.
Massachusetts: McLean Hospital, Waverley.
New York: Bloomingdale Hospital, White Plains.

FOR PUBLIC HEALTH NURSING.

Missouri: St. Louis Red Cross Public Health District Nursing Center.
New York: Henry Street Settlement, New York City.
Pennsylvania: Visiting Nurses Association, Philadelphia.

The report of the last week of June, 1919, shows 592 students on duty in 15 military hospitals and 155 students in affiliating hospitals, making a total of 747 students.

The following table shows the distribution of the students:

Dix	12
Dodge	23
Fox Hills	76
Grant	7
Letterman	43
McPherson	53
Meade	49
Fort Sam Houston	38
Fort Sheridan	91
Sherman	53
Taylor	31
United States No. 1	10
United States No. 3	23
Upton	26
Walter Reed	57
Students on duty in 15 camps	592
Students absent for service in affilating hospitals	155
Total	747

The report for the corresponding week in 1920 shows 233 students on duty in 4 military hospitals and 312 on affiliation, with a total of 549 students still in the school.

The following table shows the distribution of the students:

Letterman	27
Lovell	100
Hoff	9
Walter Reed	104
Students on duty in 4 military hospitals	240
Students absent for service in affiliating hospitals	309
Total	549

It is planned to make the Army School of Nursing a permanent part of the military nursing service, and a new group of students will enter Walter Reed Hospital in October, 1920.

There have been 200 applicants for this class, but only about 50 were found eligible.

The students are most enthusiastic and interested in their work, and in many instances are planning to enter the Army Nurse Corps after graduation and help carry on the work of the school in the future.

Enlisted Personnel.

PERSONNEL IN SERVICE.

At the date of last report, June 30, 1919, there remained in the enlisted force of the Medical Department (including Veterinary and Dental Corps) 98,396 men. During the period July 1, 1919, to June 30, 1920, the net loss in the enlisted force amounted to 83,577 men; there remained in service June 30, 1920, 14,819 men.

When The Adjutant General of the Army issued instructions to release all men who entered the service for the period of the emergency, the Medical Department made every endeavor to release as many men

as practicable; but, owing to the fact that the department had not sufficient permanent enlisted personnel to properly care for the sick and wounded then in service, it was not possible to release all emergency enlisted men as rapidly as were those of the line or other staff corps. The department, however, expressed the opinion that all temporary personnel could be discharged on or about December 31, 1919. This was actually done in so far as those who desired discharge were concerned. Some of the men did not desire to leave the service at that time, and were, at their written request, retained.

In March, 1920, examinations were held for promotion to the grades of master hospital sergeant, hospital sergeant, and sergeant first class; there were 700 applicants for admission to these classes. Of the 525 applicants who reported for the examination, 69 qualified for promotion to master hospital sergeant, 26 for promotion to hospital sergeant, and 104 for promotion to sergeant first class.

Instructions were issued by this office, per authority third indorsement, The Adjutant General's Office, June 18, 1920, to effect the termination of all temporary warrants held by enlisted men of the Medical Department, to take effect June 30, 1920. Those who held former permanent grade as noncommissioned officers will be furnished warrants as of their old grade, or its equivalent, under the reorganization act of June 4, 1920.

RECRUITING FOR THE MEDICAL DEPARTMENT.

Volunteer enlistments were reopened for the Army on February 28, 1919. On this date, there were 209,762 emergency enlisted men in the Medical Department. The problem that faced the Army was the procurement of an adequate number of enlisted men by voluntary enlistment to replace the emergency forces at the earliest practicable date. The Adjutant General foresaw that the general recruiting service could not procure the number of men in the time required and so called upon the various arms and departments of the Army to assist by organizational recruiting. While recruiting had been going on since February 28, 1919, it was not vigorously followed up by the Medical Department until July, 1919. On July 15, 1919, Circular Letter 257, Surgeon General's Office, was issued outlining Medical Department recruiting activities under Circulars 101 and 165, War Department, 1919, and Adjutant General telegram designated "Icros five." This recruiting campaign was highly successful, and on December 31, 1919, all emergency men then remaining in the Medical Department were ordered discharged unless they individually expressed their desire to remain in the service.

The number of enlistments by months for one and three year periods for the Medical Department, Veterinary Corps, and Dental Corps is given in the following table, which also shows the monthly percentage of all recruits obtained by the department:

Date.	One year.			Three years.		
	Medical Department.	Veterinary Corps.	Dental Corps.	Medical Department.	Veterinary Corps.	Dental Corps.
March, 1919	67			57		
April, 1919	370	5	1	430	5	1
May, 1919	587	9		769	3	
June, 1919	489	152		770	74	4
July, 1919	557	101	4	531	35	4
August, 1919	1,259	94	5	451	18	
September, 1919	1,183	72	3	229	14	2
October, 1919	1,281	58	3	452	21	1
November, 1919	1,273	37	2	436	15	1
December, 1919	889	54	2	272	15	
January, 1920	1,096	38	4	538	15	2
February, 1920	37	5		505	9	
March, 1920	50	1		443	20	2
April, 1920	9		1	347	11	2
May, 1920	16	1		329	20	3
June, 1920	323	21		370	35	3
Total	9,486	648	25	6,929	310	25

Date.	Total.			Grand total.		
	Medical Department.	Veterinary Corps.	Dental Corps.	Medical Department.	Army.	Procurement percentage.
March, 1919	124			124	2,202	5.6
April, 1919	800	10	2	812	13,877	5.8
May, 1919	1,356	12		1,368	23,223	5.8
June, 1919	1,259	226	4	1,489	22,144	6.7
July, 1919	1,088	136	8	1,232	22,525	5.4
August, 1919	1,710	112	5	1,827	26,105	7.0
September, 1919	1,412	86	5	1,503	10,961	13.7
October, 1919	1,733	79	4	1,816	14,574	12.4
November, 1919	1,709	52	3	1,764	13,789	12.7
December, 1919	1,161	69	3	1,233	10,443	11.8
January, 1920	1,634	53	5	1,692	13,017	13.0
February, 1920	542	14		556	8,516	6.5
March, 1920	493	21	2	516	10,607	4.8
April, 1920	356	11	3	370	8,346	4.4
May, 1920	345	21	3	369	6,996	5.3
June, 1920	693	56	3	752	9,631	7.8
Total	16,415	958	50	17,423	216,956	8.03

The study of this table shows that the months of high procurement were August, September, October, November, December, 1919, and January, 1920, and consequently the corresponding months of a date one year later will see the heaviest discharge rate of enlisted men.

The Medical Department will be recruited to its full authorized strength of 14,000 men by July 1, 1920, but unfortunately discharges by expiration of term of service and other losses through desertion, discharges for fraud, minority, and physical disability will produce heavy inroads in its enlisted strength so that by December 31, 1920, it is estimated that there will be only about 12,000 men serving in the medical services.

Organizational recruiting appears to be a fixture for the Army for some time to come. With an authorized strength of 14,000 men it is estimated that about 6,000 enlistments a year must be obtained to maintain this strength, or about 500 a month. This method of recruiting is a new departure for the Army, and the various commanding officers of general and base hospitals, division and post surgeons,

and other responsible medical officers appreciate that they must look largely to their own efforts in the matter of the procurement of required enlisted personnel.

DENTAL DIVISION.

In conjunction with all other activities of the Medical Department, the Dental Corps has adequately met the requirements of the general reduction of its service incident to demobilization of the Army, discharge of temporary officers, abandonment of camps and cantonments, the closure of hospitals, and the concentration of various Army units.

A reorganization of the Dental Corps, based upon the requirements of our Army in time of peace, gradually has been accomplished in accordance with prevailing policies and the best interests of the service. Senior dental officers have been assigned to duty at headquarters of each territorial department as department dental surgeons, assistants to department surgeons. Division dental surgeons have been retained at each of the division camps, and at the large camps where several junior officers were present the senior officer, designated camp dental surgeon, has been placed in charge. Senior officers of recognized professional ability have been assigned to duty as chief of the dental service at the various general hospitals, attending surgeon's offices, and recruit depots. This designation has also been maintained for the officer in charge of dental service with the American forces in Germany, American forces in Siberia, and at ports of embarkation.

The dental section of the Personnel Division, Surgeon General's Office, was also reorganized to meet the reduction and lessening requirements of the service. This occurred early in November, 1919, at which time it was raised to the dignity of a separate division in The Surgeon General's Office, with the senior dental officer of the Army announced as chief of division.

Dental attention for the Air Service has been continued through the assignment of a sufficient number of dental officers to that organization, where they function under general direction of the chief surgeon, Air Service.

Assignments.

Careful consideration has been given to the equitable assignment of dental officers to meet actual requirements, throughout the service. However, the demands for increased dental service in general hospitals has required officers in addition to the usual quota.

The concentration of maxillo-facial cases at Walter Reed General Hospital, General Hospital No. 2, and at Columbus Barracks and Jefferson Barracks has called for additional officers for that special service. This has required officers of marked professional ability in the construction of splints and special appliances used in the reconstructive treatment of mutilated bones of the face and jaw and in the restoration of masticatory apparatus lost through gunshot wounds or injuries. The large amount of clinical material thus available has been taken advantage of by all dental officers on duty at those stations and careful understudy made of the surgical and dental procedures followed by these specialists. It is to be regretted that more

dental officers could not have been given opportunity to obtain practical knowledge of the modern treatment of those interesting and important war injuries.

Senior dental officers assigned to the headquarters of each territorial department as assistants to the department surgeon were charged with maintaining the efficiency of the dental service under the general direction of department surgeons. This has been an important step in the development of the dental service. These officers have made tours of inspection, exercised technical supervision, have given the junior officers personal instruction with a view to standardizing the efficiency of the dental service, have acted in an advisory capacity to superior officers in matters pertaining to the dental service, and have functioned as consultants in the headquarters dental clinic. Through orders from this office they have instituted periodical dental surveys throughout the various commands for the purpose of classifying dental conditions found and improving the manner of handling the several classes of dental cases, in order to insure adequate professional attention to the greatest number.

In the latter part of 1919 dental service was established on Army transports. Preliminary experiments in the trans-Atlantic service were so successful from the standpoint of professional services rendered to passengers and crews that the transport service was organized throughout and dental officers assigned to duty on practically all Atlantic transports. At the present date the assignments in the trans-Pacific service are incomplete, although the plans for it have been fully perfected. The problems of selecting special equipment adaptable to this character of service, and the location of suitable operating space aboard ship, have been carefully considered to the extent that provisions have been made for same in all the transports now building at Government shipyards.

Equipment.

A board of dental officers was appointed by War Department orders in October, 1919, for the purpose of revising the Dental Supply Tables and standardizing dental equipment; also to make selection of the several units of equipment for utilization in peace and in war. The equipment and supplies heretofore furnished, while satisfactory as a whole, were poorly selected for units intended for field service or combat organizations, in that it was too heavy and bulky to be readily transportable. Careful experiments have been made with a view of reducing the amount of weight and bulk of all field equipment, and the adoption of new types that will meet the requirements of war-service conditions. The new tables of dental equipment will shortly be published and shall embrace the following: Base equipment for general hospitals, large infirmaries, and clinics; portable equipment for station hospitals, evacuation hospitals, and stations in the zone of communication; field equipment for use with organizations of an army in the field—army troops, corps troops, and sanitary trains; division equipment for use in combat divisions and emergency kits, being the personal equipment required for each dental officer on duty with combat organizations.

Legislation.

Under terms of the act of June 4, 1920, the Dental Corps has acquired definitely through basic law all the rights, privileges, credits of service for promotion, increased service pay, and retirement heretofore authorized in part by the acts of March 3, 1911, June 3, 1916, comptroller's decision of July 22, 1916, and the act of October 6, 1917. The equitable provisions of this new law places the Dental Corps on equal status as one of the integral corps of the Medical Department of the Army. This definite establishment of the status of dental officers will conduce to the betterment of the service, in that it will attract the best class of graduates to a military career, promote contentment and esprit de corps among its personnel, and produce salutary satisfaction to the American dental profession, whose whole-hearted, loyal cooperation has been unstinted during the war period.

It is greatly regretted, however, that the number of dental officers authorized was not increased from the original proportion of 1 to 1,000 of the authorized strength of the Army. The character of reconstructive dental operations has so greatly changed during the past few years, and the demands so increased for higher professional attention along lines of preventive dentistry and in consultation with medical officers in locating obscure pathological conditions as possible etiologic factors to systemic disease, that the proportion of 1 to 1,000 is wholly inadequate to the present needs of the Army in securing dental service of modern type. It is hoped this important matter will receive remedial consideration at an early session of Congress.

Character of Service.

For the first time in the corps' history, the installation of complete operating equipment and laboratory with modern electrical appliances have been made in each of the dental offices at the permanent posts of the Army. This has been possible through utilization of part of the vast quantity of this type of equipment purchased during the war. This fact alone insures a higher class and greater number of operations. It also obviates the necessity heretofore followed of shipping bulky equipment by express from station to station whenever dental officers were on itinerary duty or reassigned.

Dental activities for the year have been eminently satisfactory and the number and character of constructive operations resulting have been very gratifying. It is both pleasing and noteworthy to record the great increase in number of cases where dental officers, through clinical findings and skillful radiography, have rendered able assistance to medical officers in the diagnosis and treatment of obscure lesions of dental origin—contributing factors to undermined health and efficiency.

The old-established custom of giving precedence to emergency cases has been maintained. While primarily this means treatment for the relief of pain, it has grown to indicate for the enlisted personnel the practice of oral prophylaxis, i. e., the extraction of broken-down teeth and putrescent roots, evacuation of abscesses, and the removal of rough calcareous deposits impinging upon the gingivae.

It will be observed with reference to the attached tables that ample consideration has been given tooth conservation, root reclamation and filling, masticatory restoration, and prosthetic construction (crowns, bridges, and dentures).

Under the provisions of Army Regulations, there are many "others entitled to treatment"—wives, families, etc. In certain clinics, notably at attending surgeons' offices, headquarters clinics, and general hospitals, this class of service has been appreciably large. It has maintained the normal run at all posts or stations of permanent command. While this class of service is authorized "when practicable," it has become an established custom to grant to families of officers and enlisted men the same character of service usually accorded respectively to them. Thus, the dental officer spends approximately the same amount of time and effort to the case with these patients as with officers and men and the sum of these activities should justly be recorded and credited.

Dental service at general hospitals has been amplified to embrace the highest type of professional attention, and to this end experienced senior officers of recognized ability have been placed in charge and an adequate number of commissioned personnel assigned. In the abstract, the following routine methods have been followed in the treatment of patients in hospitals:

A survey of the mouth and teeth, upon which gross classification is recorded, is made for each patient admitted, as soon thereafter as practicable; with ambulatory cases this was accomplished by having patients report to the dental clinic, otherwise the survey and classification has been made at the bedside. As a result of records thus obtained, the chief of dental service has consulted with the chief of the special service to which the patient was assigned, with a view of primarily eliminating all oral or dental conditions that may have bearing upon the general pathology of the case. The value of this professional cooperation has been markedly beneficial in cases of traumatic fracture, focal infections, and in Vincent's stomatitis. As early as practicable, the patient has been ordered to the dental clinic for oral and dental prophylaxis and the cleansing and polishing operations necessary along lines of preventive dentistry, this being followed by treatment for septic teeth and root canals, with a view to reclamation and filling, and such constructive operations and permanent fillings as would restore mastication.

As a final procedure and when indicated, efforts were made for the complete restoration of mastication by the construction of prosthetic appliance, i. e., crown, bridge, or denture. This method of dental procedure in general hospitals has been a great stride in the utilization of dentistry in the successful treatment and early return to health of patients in hospital.

In general hospitals assigned for the care and treatment of tubercular patients the above plans are augmented by special care and consideration given at frequent intervals to the examination of suspected dental areas and to repetition of oral prophylaxis, with a view of maintaining a very high status of health in all oral and dental tissues. It is believed the elimination of all possible sources of infection and

absolute cleanliness of the mouth and teeth have materially assisted in the treatment of tubercular cases.

The methods employed at recruit depots have been along lines to insure the greatest number of recruits possible being placed in a dentally fit condition prior to their assignment to organizations. This is done primarily to improve the general health of recruit, and secondary, to lessen the duties imposed upon dental surgeons at posts or stations throughout the country. This procedure has been followed by a survey and classification of each recruit as he goes through the channels of the medical service, followed by oral prophylaxis, extraction of broken-down teeth and putrescent roots, evacuation of abcesses, removal of rough calcareous deposits, etc., and at a later period, by constructive dental operations (fillings, etc.) for restoration of mastication, leaving the larger number of reclamation cases requiring long continuous treatment (i. e., putrescent canals, etc.), and the large complicated fillings until the recruit arrives at his station. In these instances a blank form has been filled out by chief of dental service at recruit stations for transmittal to the station dental surgeon, outlining what has been done for the recruit and what yet remains undone. In this connection, it is the hope of the Dental Division that at some time in the near future, after the reorganization of the Army, it will be possible to install sufficiently large clinics at each one of the recruit depots in the United States to insure a dentally fit condition for each of the accepted recruits of the Army, prior to his assignment to an organization. Thus handling the intake personnel at its source will relieve the overcrowded condition of dental service with organizations and furnish each recruit complete and serviceable mastication during that period of enlistment.

TABLE 95.—*Dental service rendered at stations of the United States Army.*

	Number of persons treated.	Number of sittings.	Permanent fillings.	Root canal fillings.	Crowns.	Bridges.	Dentures.
Camps	60,987	116,404	65,142	6,203	1,937	1,141	987
General hospitals	46,439	113,516	37,600	2,868	1,139	831	1,609
Permanent posts	40,846	70,810	45,650	4,282	574	266	323
Miscellaneous stations	31,124	54,524	32,732	1,799	601	347	332
Base and camp hospitals	11,440	22,955	10,958	1,345	102	93	108
Air Service	10,719	20,372	9,477	973	232	76	42
Total in United States	201,555	398,581	201,559	17,470	4,585	2,754	3,401
Total in Canal Zone	2,423	4,923	3,113	263	68	39	4
Total in Philippines	12,084	25,608	15,904	763	176	118	46
Total in Hawaii	4,619	8,475	4,016	462	122	147	24
Total in United States and possessions	220,681	437,587	224,592	18,958	4,951	3,058	3,475
American Expeditionary Forces, Siberia	4,785	9,606	3,492	686	39	3	3
American Forces in Germany[1]	9,387	26,904	8,316	1,139	.....	.....	182
Grand total	234,853	474,097	236,400	20,783	4,990	3,061	3,660

[1] 3,229 cases of Vincents stomatitis were treated in the American Forces in Germany.

TABLE 95.—*Dental service rendered at stations of the United States Army*—Continued.

	Extractions.	Calculus removed.	Crowns repaired.	Bridges repaired.	Dentures repaired.	Others entitled to treatment—family.	Other sittings.
Camps	17,920	12,593	221	275	144	4,864	8,845
General hospitals	13,921	13,478	137	240	210	6,420	15,709
Permanent posts	14,469	9,655	89	135	72	5,506	9,245
Miscellaneous stations	5,995	6,267	66	98	95	6,931	12,521
Base and camp hospitals	4,195	2,154	25	43	20	582	1,281
Air Service	2,659	2,229	18	19	9	810	1,586
Total in United States	59,059	46,376	556	810	550	25,113	49,187
Total in Canal Zone	683	608	4	7	1	344	828
Total in Philippines	3,751	3,743	10	21	4	2,021	3,655
Total in Hawaii	2,388	642	4	6	1	808	1,668
Total in United States and possessions	65,881	51,369	574	844	556	28,286	57,847
American Expeditionary Forces, Siberia	1,111	1,166	5	6	5	216	303
American Forces in Germany [1]	2,813	.....	.....	.....	.....	653	2,206
Grand total	69,805	52,535	579	850	561	29,155	60,356

[1] 3,229 cases of Vincents stomatitis were treated in the American Forces in Germany.

VETERINARY DIVISION.

COMMISSIONED PERSONNEL.

The commissioned strength of the Veterinary Corps shows a progressive reduction throughout the year from 1,024 on duty June 30, 1919, to 283 on June 30, 1920, as appears below:

TABLE 96.—*Strength of the Veterinary Corps, United States Army, June 30, 1919, to June 30, 1920.*

Grades.	1919							1920					
	June 30.	July 31.	Aug. 31.	Sept. 30.	Oct. 31.	Nov. 30.	Dec. 31.	Jan. 31.	Feb. 29	Mar. 31.	Apr. 30.	May 31.	June 30.
Lieutenant colonels:													
Regular	2	5	5	5	4	4	4	3	3	3	3	2	2
Temporary	2	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	5	5	5	4	4	4	3	3	3	3	2	2
Majors:													
Regular	36	33	33	32	31	29	29	29	28	22	22	21	21
Temporary	34	29	17	12	11	10	6	6	6	6	6	6	6
Total	70	62	50	44	42	39	35	35	34	28	28	27	27
Captains:													
Regular	32	32	30	29	29	29	29	29	30	28	26	23	22
Temporary	155	118	72	56	47	44	44	44	41	39	37	36	36
Total	187	150	102	85	76	73	73	73	71	67	63	59	58
First lieutenants:													
Regular	39	36	32	29	30	28	28	28	28	30	24	21	20
Temporary	351	265	177	143	132	130	121	115	114	111	104	100	97
Total	390	301	209	172	162	158	149	143	142	141	128	121	117
Second lieutenants:													
Regular	2	1	2	2	2	3	3	3	3	7	15	21	21
Temporary	370	231	128	93	77	71	74	71	67	61	60	60	56
Total	372	232	130	95	79	74	77	74	70	68	75	81	77
Retired, regular	1	1	1	1	1	1	1	1	1	1	1	1	2
Totals:													
Regular	111	107	102	97	96	93	93	92	92	90	90	88	86
Temporary	912	643	394	304	267	255	245	236	228	217	207	202	195
Retired	1	1	1	1	1	1	1	1	1	1	1	1	2
Total	1,024	751	497	402	364	349	339	329	321	308	298	291	283

NOTE.—Regular officers are shown in advanced temporary grades.

Until November 1 this reduction followed the reduction in the number of animals. The strength of the latter on that date was approximately 82,000 and the number of veterinary officers 369, or 4.5 officers per 1,000 aimals, the ratio deemed necessary for adequate service. This ratio is more or less a convenient rule of thumb, since a certain number of officers are occupied solely with meat-inspection duties, the volume of which pertains to the human rather than the animal strength. As a rule, however, it has been found sufficiently accurate to define the veterinary officer needs of the Army.

Since November 1 the number of veterinary officers has fallen to 283, while the animal strength has remained fairly constant between 82,000 and 85,000 with no likelihood of reduction, and the meat-inspection requirements have not diminished. Consequently there exists a shortage of veterinary officers which is progressively becoming more acute and is resulting in curtailment of the veterinary service. The only relief will appear to be the assignment of Reserve officers to active duty. No such officers have been made available to date.

STRENGTH OF THE VETERINARY CORPS.

The Veterinary Corps of the Regular Army has steadily lost in strength, as shown in the following tabulation:

TABLE 97.—*Changes in the Veterinary Corps, Regular Army, June 30, 1919, to June 30, 1920.*

	Majors.	Captains	First lieutenants.	Second lieutenants.	Total.
June 30, 1919	8	17	22	64	111
Losses:					
Deaths	0	0	0	0	0
Resignations	0	0	2	19	21
Retirements	1	1	1	1	4
Discharges	0	0	0	0	0
Other causes	0	0	0	0	0
Total	1	1	3	20	25
Appointments	0	0	0	0	0
Net loss	1	1	3	20	25
June 30, 1920	7	16	20	43	86

The net loss has been 25 officers or 22.5 per cent. Twenty-one of these were resignations of first and second lieutenants who saw no future in the Army and were actuated by unusually attractive inducements in civil life. As might be expected, the men who have resigned have generally been of a promising type, and it is a serious matter to the Veterinary Corps, both of the present and the future, to have lost their services. The veterinary section of the Officers' Reserve Corps has developed as appears below:

TABLE 98.—*Strength of veterinary section, Officers' Reserve Corps, inactive list, June 30, 1919, to June 30, 1920.*

Rank.	1919							1920					
	June 30.	July 31.	Aug. 31.	Sept. 30.	Oct. 31.	Nov. 30.	Dec. 31.	Jan. 31.	Feb. 29.	Mar. 31.	Apr. 30.	May 31.	June 30.
Majors	0	1	1	2	2	3	4	5	7	9	11	12	12
Captains	4	4	5	18	22	23	25	29	30	41	43	44	46
First lieutenants	8	10	14	17	23	48	61	66	72	87	93	97	98
Second lieutenants	80	83	85	97	97	158	160	162	165	165	170	174	177
Total	92	98	105	134	144	232	250	262	274	302	317	327	333

Considerable effort has been made to interest veterinarians who served during the World War, especially men of standing and reputation, to apply for commissions in the Reserve Corps with slight success. It has also been expedient to attempt to interest the civilian profession as a whole in the Army veterinary service. Without doubt the official status of veterinarians in the Army has in the past tended to discourage all such efforts, but it is believed that the results of recent legislation are such as will tend to materially improve this undesirable situation.

NEW LEGISLATION.

The act of June 4, 1920, established a commissioned Veterinary Corps of 175 officers in grades from second lieutenant to colonel. Veterinary officers are eligible for promotion to the grade of first lieutenant after 3 years of service, to that of captain after 7 years, to that of major after 14 years, to that of lieutenant colonel after 20 years, and to that of colonel after 26 years. No enlisted force was provided. For the first time the Veterinary Corps is placed on a sound working basis and finds itself in a position to develop into a real organization, to render the service which the Army demands, and to form a dependable nucleus for expansion in time of war. It signifies a great deal to the efficiency of the veterinary service that veterinary officers are on a parity with other commissioned officers and that as representatives of an important and progressive scientific profession which has a responsible part to play in the Army they are no longer subject to discrimination. An opportunity now exists to appeal to the best type of young veterinary graduate in civil life and offer him reasonable inducement to consider the Army as a career.

A corps of 175 officers, assuming it to be filled, will unquestionably prove inadequate to perform the duties required by the present Army, and it is estimated that the services of approximately as many Reserve officers on active duty will be needed practically all the time. The reorganization of the Veterinary Corps is now in active progress with the examination of practically all regular officers for promotion and of temporary officers for appointment. A recommendation that officers eligible to promotion be promoted subject to examination was returned disapproved.

Enlisted Personnel.

The changes in the enlisted strength appear in the following table:

Table 99.—*Strength of the veterinary enlisted force June 30, 1919, to June 30, 1920 (monthly), including enlisted men of the Veterinary Corps, National Army (selective service), and enlisted men of the Medical Department (Regular Army) assigned to Veterinary Corps service.*

	1919													
	June 30.		July 31.		Aug. 31		Sept. 30.		Oct. 31.		Nov. 30.		Dec. 31.	
	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.
Sergeants, 1 cl	41	31	13	29	5	31	3	29	0	45	0	42	0	42
Sergeants	98	64	45	56	24	61	20	60	5	70	5	70	0	73
Stable sergeants	0	0	0	0	0	0	0	0	0	0	7	166	4	139
Corporals	70	43	36	36	30	44	26	35	2	43	1	46	2	42
Cooks	18	15	12	10	5	16	4	13	0	14	0	11	0	11
Horseshoers	8	9	6	7	3	9	6	7	0	8	0	7	0	7
Farriers[1]	251	146	142	124	150	140	123	143	5	160	0	0	0	0
Saddlers	12	7	7	5	4	3	1	2	0	2	0	2	0	2
Mechanics	7	4	6	4	2	4	2	4	0	3	0	3	0	3
Privates, 1 cl	476	138	229	92	130	132	108	124	2	158	0	156	0	195
Privates	862	412	288	448	221	417	144	460	1	475	0	520	0	558
Total	1,843	869	784	811	574	857	437	877	15	978	13	1,023	6	1,072

	1920											
	Jan. 31.		Feb. 29.		Mar. 31.		Apr. 30.		May 31.		June 30.	
	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.	Selective service.	Regular Army.
Sergeants, 1 cl	0	44	0	44	0	41	0	38	0	36	0	34
Sergeants	0	65	0	63	0	68	0	78	0	76	0	68
Stable sergeants	2	135	2	125	2	142	2	135	2	125	1	97
Corporals	1	44	1	46	1	42	1	40	1	34	0	31
Cooks	0	10	0	13	0	13	0	11	0	11	0	9
Horseshoers	0	1	0	6	0	8	0	12	0	13	0	11
Farriers[1]	0	0	0	0	0	0	0	0	0	0	0	0
Saddlers	0	0	0	1	0	1	0	1	0	2	0	2
Mechanics	0	1	0	3	0	6	0	9	0	11	0	9
Privates, 1 cl	0	172	0	201	0	195	0	237	0	234	0	236
Privates	0	602	0	610	0	572	0	512	0	497	0	459
Total	3	1,074	3	1,112	3	1,088	3	1,073	3	1,039	1	956

[1] Designation of farrier was changed to stable sergeant on Nov. 17, 1919, under the provisions of General Order 127, War Department, 1919.

An active recruiting campaign has been maintained during the entire year in the effort to replace the selective service men being discharged. The results have been excellent. Under the provisions of General Orders, No. 127, War Department, 1919, an enlisted force of 1,500 men was authorized as an increase to the authorized strength of the Medical Department to be enlisted in

the Medical Department for the Veterinary Corps of the following composition:

Master hospital sergeants	7
Hospital sergeants	8
Sergeants first class	45
Sergeants	150
Corporals	75
Cooks	60
Horseshoers	30
Stable sergeants	300
Saddlers	15
Mechanics	30
Privates first class	645
Privates	135
Total	1,500

Men previously enlisted under the provisions of Circular 141, War Department, 1919, were incorporated in this force. Allotments were made to stations. Requirements were prepared for the grades of sergeants, stable sergeant, and corporal and examinations held in the United States and Panama on February 25 for these grades and in the other foreign possessions at later dates.

The act of June 4, 1920, failed to provide an enlisted veterinary force or to increase the total allowance of the Medical Department to include necessary men for the veterinary service, which is felt to be a very serious omission. Sick animals require the same care as sound ones, plus the additional labor incident to their treatment. When the soldier's mount gets sick, it is replaced by a sound animal. Therefore the soldier is not available for attending the sick animal, and if he were he lacks the special training so essential. It is therefore difficult to comprehend how the Veterinary Corps can furnish adequate care for the sick animals of the Army without a small and properly trained enlisted force permanently assigned to such duties.

Fortunately the authorized enlisted strength of the Medical Department for the fiscal year 1920–21 is such that an allotment of 1,500 men can be spared for service with the Veterinary Corps, and arrangements to this effect have been made in order to preserve the veterinary enlisted force from complete disintegration and to render the necessary service. This can only be regarded as a temporary measure of relief, since subsequent to June 30, 1921, under the present law the enlisted strength of the entire Medical Department will be based on the actual strength of the Army and will doubtless undergo a sharp reduction, leaving it only sufficient for the maintenance of the hospital and sanitary service. Other provision in the form of suitable legislation will then become an urgent necessity to enable the veterinary service to properly meet its responsibilities in caring for the sick animals.

General Activities.

SERVICE OF THE INTERIOR.

The following shows the assignment of veterinary officers and the nature of the service maintained on June 30, 1920:

Place and nature of duty.	Animals.	Officers.	Place and nature of duty.	Animals.	Officers.
Administrative			Permanent remount depots	8,466	8
Surgeon General's Office		4	Independent stations (United States)	2,320	13
Department veterinarians (United States)		4	Stations under department commanders (United States)	62.227	163
General veterinary inspectors		2	Philippine Department		[1] 10
Total		10	Canal Zone Department		[1] 4
Veterinary laboratory service		5	Hawaiian Department		6
Instruction and training		7	American expeditionary forces, Germany		9
General supply depots (chiefly meat-inspection duties)		25	On leave, sick, etc		8
Animal purchasing boards		14	Grand total	73,013	283
Animal transport service (transport Dix)		1			

[1] Includes 2 officers on meat-inspection duty at a purchasing point.

ADMINISTRATION.

The commissioned personnel of the Veterinary Division of the Surgeon General's Office has been reduced to one medical and four veterinary officers, due to the natural contraction following the war.

In supervising a service and maintaining the professional activities inherent to the Veterinary Corps, an office organization is necessary which is strictly analogous and parallel to that for the medical service. The three larger sections, comprising organization and personnel, veterinary sanitation under the two subheads of animal sanitation and meat and dairy hygiene, and animal sick and wounded report are equivalent to the main subdivisions long existing in this office, while the smaller sections, pertaining to veterinary supplies and equipment, veterinary hospital construction, veterinary laboratories, and veterinary instruction and training, are likewise similar to medical activities. All these functions are dictinctively veterinary, are intimately involved with the administration, correlation, and development of the veterinary service at large, and their intelligent performance requires the attention of qualified officers.

In sympathy with War Department policy, active efforts have been made to limit unnecessary paper work. Weekly reports adopted during the war have been placed on a monthly basis. In connection with the proposed rewriting of regulations, for which a large amount of material has been collected, the revision of all veterinary reports is contemplated. A bulletin for veterinary officers, published twice a month as a supplement to the Bulletin of the Surgeon General's Office, was established in January, 1920, and has been of great value in disseminating important information concerning their military and professional duties among veterinary officers.

The issue of General Orders, No. 132, War Department, 1920, decentralizing Army administration placed the jurisdiction of the veterinary service under the department commanders with the

exception of the general supply depots, animal purchasing boards, four permanent remount depots, and the independent stations. General Orders, No. 132, leaves the question of a veterinary officer, or department veterinarian, at department headquarters entirely dependent on the recommendation of the department commander. It has been the policy and constant effort of this office to secure the assignment of veterinary officers of experience and senior rank in each department to act as department veterinarians and assistant to the department surgeon. Such an officer also furnishes veterinary attendance at headquarters. While a department veterinarian is not an independent staff officer, but is a technical assistant to the department surgeon, he is available to the department commander for expert advice in veterinary matters and serves to supervise and coordinate the departmental veterinary service. The successful development and continued efficiency of the veterinary service will be largely dependent on the manner in which these duties are performed and they are felt to be the legitimate duties of the colonels and lieutenant colonels of the Veterinary Corps. In addition to the Philippines, Hawaiian, Panama, and Southern Departments, where such officers have been on duty during the entire year, department veterinarians have been detailed to the Eastern, Central, and Western Departments. General veterinary inspectors reporting direct to this office have been on duty the entire year and have been of very material aid to efficiency and progress.

LABORATORY SERVICE.

The veterinary laboratory at Philadelphia continued in active operation until March 20, 1920, when it was discontinued and its personnel and equipment transferred to the laboratory of the Army Medical School. The work of this laboratory has continued of high quality. It manufactures all the mallein used by the Army and has prepared and issued 657,665 doses during the year. Original work of considerable value has been accomplished, as follows:

Influenza vaccine.—The subject of influenza, or "shipping fever," is of great importance to the Army, and during the past year this office has received constant requests for serum and vaccines to use as prophylactic and curative agents to combat this disease. Of the bacterins, serums, and other biologics on the market for the treatment and prevention of this disease, but one thing can be honestly said—they have not given results. In view of the doubtful value of these biologics, the policy has been followed of disapproving requisitions. However, in view of the importance of the subject and the state of our present knowledge, it is felt that much remains to be done in solving the problem.

Most of the commercial influenza bacterins include all or a number of the following organisms: Streptococcus equi (Schutz); staphylococcus aureus, albus, and citreus; B. bipolaris equisepticus; B. coli, and strains of pneumococci. The staphylococci and streptococci other than the streptococcus of Schutz, which is accepted as the cause of strangles, are usually considered as secondary invaders. The B. coli and pneumococcus may also act in this capacity; hence these so-called mixed infection bacterins have been used with a view to conbating secondary invaders.

The main drawback to advocating the use of bacterins in this capacity is the fact that so many of them are not potent. The streptococcus rapidly loses its viability and virulence in vitro, and in view of the doubtful or at least relatively minor pathologic significance of staphylococcus aureus, albus, and citreus, it was believed these organisms might well be omitted; also, possibly, B. coli and pneumococcus.

There is reason to believe that B. paratyphosus (b) and enteritidis (Gaertner) may have something to do with so-called shipping fever, in view of the fact that nearly 100

per cent of the animals purchased and shipped are put on sick report for this disease, while few, if any, cases are reported among the seasoned animals. These organisms, which appear to be widespread about shipping yards and stables, were quite conclusively proven to be the causative factor in the sudden deaths occurring among mules shipped into the Atlanta stockyards.

Based on this reasoning, the laboratory has prepared a mixed-infection influenza bacterin containing the following organisms from freshly isolated cultures:

Streptococcus equi (Schutz), 5 strains.
B. bipolaris equisepticus.
B. paratyphosus (b).
B. enteritidis (Gaertner).

The bacterin is for use as a prophylactic agent with animals susceptible to shipping fever, which may or may not have been exposed to infection. Treatment consists in three graduated doses put up in 2, 4, and 6 cubic centimeter ampules to be administered at intervals of five days. Up to June 30, 1920, 1,409 treatments had been issued. But one report has been received of the results, and opinion as to its efficacy must be withheld for the present.

Infectious abortion serum.—During the year infectious abortion appeared among the breeding mares at Fort Keogh, Fort Reno, and Front Royal Remount Depots. Bacterin for the treatment of affected mares was prepared at the Southern Department, Central Department, and Philadelphia Laboratories.

In view of the fact that investigations at the Kentucky Experiment Station (Bul. 204, Sept. 1, 1916) showed it is possible to produce a hyperimmune serum which had marked bacteriolytic properties in vitro, although it did not protect a pregnant mare from an artificial infection with a massive intravenous dose of live organisms, the production of such a serum for the treatment of Army pregnant mares was started at Front Royal Remount Depot. Two good-sized animals were selected and are being hyperimmunized. On June 30, 1920, it was not considered that the serum from these animals had acquired the necessary potency, but it is expected that a hyperimmune serum will be produced in time to treat Army mares with a view to preventing abortion at next foaling season. The results of this test will be closely followed.

Action of acetic acid on the bacillus necrophorus.—Following the report of the veterinarian of one remount depot of uniformly good results in the treatment of necrophorus infection by the use of dilute vinegar as a foot bath, experiments were conducted which demonstrated that solutions of acetic acid, C. P., also vinegar, have a marked germicidal action on the bacillus necrophorus. In the laboratory tests, bichloride of mercury, carbolic acid, and liquor cresolis comp. were used in comparison with vinegar. Vinegar ranked first in germidical action and liquor cresolis comp. next.

Experiments were made with a view to determining the value of vinegar as a soil disinfectant. It was determined by animal inoculation that infected soil saturated with pure cider vinegar was not capable of producing the disease in six rabbits.

Commercial cider vinegar having an acidity of approximately 5½ per cent compares favorably with acetic acid, C. P., in its efficiency in destroying B. necrophorus. In a dilution of 1 to 3 it destroyed or so attenuated the B. necrophorus as to render it incapable of killing rabbits, while a dilution of 1 to 4 failed to produce this result.

It is concluded that both acetic acid and commercial cider vinegar are efficient as agents for the destruction of B. necrophorus, and in view of the reported success in treating gangrenous dermatitis with vinegar their further use in the field is warranted.

While a one-half to 1 per cent solution of acetic acid, C. P., and a dilution of 1 part of commercial cider vinegar in 3 parts of sterile distilled water was demonstrated as capable of destroying or greatly attenuating the B. necrophorus in tissue emulsions, it is believed that in practice a 1 to 1½ per cent solution of acetic acid, C. P., and either pure or a dilution not greater than 1 to 1 of commercial cider vinegar should be utilized. Liquor cresolis comp. proved much more efficient in destroying the bacillus in tissue than did bichloride of mercury or phenol.

This laboratory has also served as a school for training veterinary officers in laboratory technique. A veterinarian has been on duty during the year in the department laboratories of the Central, Southern, and Western Departments, where they have handled the strictly veterinary work and have been of assistance in the general work of the laboratory to the mutual advantage of both medical and veterinary services, besides supplying service for the station when required.

The following tabulation presents a summary of all the routine veterinary laboratory work:

Summary of laboratory work.

Serological examinations for glanders	6,442
Serological examinations for dourine	687
Serological examinations for infectious abortion	625
Serological examinations for other conditions	14
Mallein production (doses)	657,665
Tissue and pus examinations for glanders	231
Tissue and pus examinations for gangrenous dermatitis	169
Tissue and pus examinations for other conditions (equines):	
(a) Anthrax	3
(b) Malignant edema	2
(c) Mange	35
(d) Miscellaneous	9
(e) Tumors	2
Tissue examinations for other conditions (other animals):	
(a) Actinomycosis (cow)	3
(b) Cholera, fowl (pigeon)	1
(c) Cholera, hog	6
(d) Contagious abortion, cow	3
(e) Rabies, dog	4
(f) Tuberculosis, cow	2
Other examinations: Urine	1

INSTRUCTION AND TRAINING.

The lack of training schools for both officers and men in basic and professional duties has been keenly felt. The basic instruction will, it is anticipated, be provided in future at the Field Medical Training School recently authorized at Carlisle, Pa., supplemented by suitable field work with mounted organizations. The course of instruction, originated at the general supply depot in Chicago during the war, has been continued up to the present time by the assignment of such officers and men as were available for an intensive training in meat and dairy inspection duties. Some 51 officers and 120 enlisted men have passed through this school during the year.

This instruction henceforth will be continued in a Veterinary School of Meat and Dairy Hygiene and Forage Inspection formally authorized by the War Department for the definite purpose of instructing veterinary officers and enlisted men in duties pertaining to the inspection of meats and meat-food products and forage in connection with the purchase, storage, shipment, and issue of these supplies, and to the sanitation of establishments, storehouses, vehicles, or other places in which they are prepared, stored, shipped, issued, or otherwise handled. This school will form a part of the permanent system of Medical Department instruction. Two courses of five months' duration will be given, each with a maximum attendance of 15 officers and 20 enlisted men. All officers of the Veterinary Corps, all applicants for commission therein, and reserve officers will be sent to this school as their services can be spared. This instruction covers a very essential phase of the military education of every veterinary officer and of his enlisted assistants, and the urgent demand from the Army for men qualified in these duties is pressing and thus far has been impossible to meet. The instruction schedules are nearing completion and the first class of officers and enlisted men will report about August 1, 1920. In addition to the veterinarian of the depot in charge of instruction, 3 officers and 4 enlisted men will be required as assistant instructors.

The next step in the training program for the Veterinary Corps will be the establishment of a training school for service with animals. It is essential that this be located at a large camp of adequate animal strength and possessing a veterinary hospital, to afford suitable clinical and other instruction facilities. This project is now under consideration.

Detailed plans have been worked out for a veterinary school for the instruction of enlisted specialists in service with animals at Camp Lee, Va., but the uncertain future of that station has forced their temporary if not permanent abandonment.

There has been an insistent demand for veterinary officers to act as instructors in hippology and horseshoeing for officers and enlisted men of the line at the special service schools of the mounted branches. The post veterinarian at Fort Riley has conducted the course of instruction in hippology at the Cavalry school for the entire year. The post veterinarian at Fort Sill and the camp veterinarian at Camp Taylor (later Camp Knox) have maintained instruction in hippology and horseshoeing in the Field Artillery schools at these points, as has the camp veterinarian at Camp Humphreys for the Engineer school. The services of veterinary officers have been very generally utilized as horseshoeing instructors at camps and other stations and are in fact available wherever they are on duty. At the request of the Chief of the Remount Service, a schedule for a 15-day course in practical breeding operations for enlisted men, as a part of the vocational training program, was prepared and the veterinarians of the remount depots at Camps Lee, Grant, Funston, Travis, Pike, and Gordon were directed to conduct the course. No reports as to the results are available. A new departure has been the assignment of one veterinary officer to the Army War College as a special student, and the course was creditably completed.

GENERAL SUPPLY DEPOTS.

A veterinary service is maintained at 11 general supply depots, besides several subdepots subordinate thereto. The greater part of the meats and forage are purchased at these points and are accepted subject to veterinary inspection. Purchasing is also conducted in considerable quantities in China and Panama and veterinary officers from the Philippines and Panama Canal Departments are assigned to this work. The duties of a supply depot veterinarian have been systematized and developed. Their main responsibility is in the inspection of meats and meat-food products at time of purchase for sanitary and specification requirements. Reinspections of large quantities of surplus supplies before sale to the public have also been required. These duties are performed under the direction of the officer in charge. The depot veterinarian has been required in many cases to visit stations within the zone and to act in an advisory capacity to the local quartermaster. The opinion of this office that any part of the veterinary service of a station should not in any sense function under station supply officers has been sustained by the War Department (Bulletin 19, 1919), but this provision in no wise prevents the local supply officer from receiving any assistance which he may require from the expert from the general supply depot.

ANIMAL PURCHASING BOARDS.

Animal purchasing boards resumed active operations in October, 1919, and continued throughout the year. The number of veterinary officers on this duty reached a maximum of 14 on June 30, divided among the different purchasing zones as their services were required. Practically all the animals bought have been horses. The reports received in this office, which represent about 90 per cent of the total, show the following figures relative to numbers inspected, accepted, and a comparison of the results in different localities:

Locality.	Animals examined.	Animals accepted.	Per cent of rejections.
Front Royal, Va., and Louisville, Ky.	2,366	1,593	33
Kansas City	6,299	3,365	46.6
Oklahoma and Fort Reno	7,584	1,900	75
Boise, Mont., and Fort Keogh	1,442	475	67
Sacramento, Calif.	1,078	517	51.5
Total	18,769	7,850	58

Unfortunately the reports received have not been sufficiently complete to show causes of rejection.

ANIMAL TRANSPORT SERVICE.

One officer has been on continual duty as veterinarian of the transport *Dix*, plying between Pacific ports and the Philippines. He has had two enlisted assistants. A total of 1,575 animals have been transported to Manila. There were no unusual losses from diseases or injury and no special incidence of communicable diseases. On March 15, 1920, the transport *Dix* left Manila for Vladivostok with 4 animals on board and returned to Manila March 31, with 310 animals without a loss.

PERMANENT REMOUNT DEPOTS.

The service at these stations has been extensive and exacting largely because they have served as the collecting points for a considerable part of the newly purchased animals and the incidence of the various types of disease prevalent amongst green animals has been high. Breeding operations have been conducted at all of them and considerable difficulty was experienced with a widespread epidemic of contagious abortion which is discussed elsewhere. On the recommendation of this office a veterinary officer was assigned to the Remount Board organized by War Department order for the encouragement and development of the breeding of remounts by civilians and contemplated to result in improving the type of animal available to the Army.

SERVICE OF CAMPS AND POSTS.

Veterinary officers are assigned to 74 such stations, and in many instances they act as attending veterinarians to a number of smaller posts in the vicinity. The veterinarian of the Presidio of San Francisco makes regular visits to all the stations around the harbor, as

does the veterinarian at Fort Jay. In this way veterinary service is rendered in part at least to some 25 additional places. Obviously there are many smaller stations where both human and animal strength are so small as not to justify the assignment of a veterinary officer. Authority is granted for the employment of civilian veterinarians for necessary attendance in such cases. It is felt that the veterinary service of a station is part of the Medical Department service for which the surgeon should accept responsibility in the absence of a veterinary officer. Plans are now being laid for the assignment to such stations of a soldier qualified for Veterinary Corps service and enlisted therein as the assistant of the surgeon in the conduct of the service with animals and the inspection of meat and dairy products and forage. In this way it is hoped to provide for the veterinary service at all stations of any consequence.

The auxiliary remount depots which have sheltered the bulk of the animals and have consequently demanded the largest veterinary personnel have been gradually abandoned until but nine remain in operation, one at each divisional camp, one at Camp Fort Bliss, and one at Camp Kearney, and designated as camp remount depots. Under the provisions of General Orders 132, War Department, 1920, the depots were all placed under the jurisdiction of the department commanders. The question of whether a camp remount depot is also under the control of the camp commander is one which the War Department has decided lies entirely with the respective department commanders. It has been a matter of some importance to the veterinary service because two separate veterinary detachments are now maintained, one at the remount depot and one in the camp. The camp veterinarian is without official relation to the veterinary service of the depot, although such service is inseparable from that of the camp. Furthermore, the only veterinary hospital at these stations happens to be at the remount depot, and the camp veterinarian lacks control and official contact therewith which is felt not to be to the best interests of the veterinary service.

When personnel was assigned to the existing divisions an effort was made to keep on duty with them the authorized allowance of veterinary officers and enlisted men. The failure to issue the animals to the divisions has made this personnel appear superfluous and has not tended to contentment while it has deprived them of much needed practical training in duties with the animals of the division. In some instances such officers have profited by temporary assignment to the remount depot for practical experience.

The animal quarantine station maintained by the Veterinary Corps at the port of embarkation, Newport News, for animals sent to the United States from the American forces in Germany with the authority and cooperation of the Chief of the Bureau of Animal Industry was opened September 1, 1919, and closed March 13, 1920. During this time, 67 officers' mounts and 55 public animals were cared for, of which 65 private and 54 public mounts were eventually released. One private mount was destroyed for trypanosomiasis, one for chronic and incurable mange, and one public mount for ulcerative lymphangitis.

The regulations prescribed by this office and approved by the Secretary of War and the Secretary of Agriculture required one month of quarantine in France and five at Newport News. This quarantine was individual during the entire period.

Upon arrival at Newport News each animal was securely tagged for identification, numbered, and provided with shelter, dry standing and separate box stall, separate grooming kit, blankets, watering bucket, stable utensils, feeding place, etc.

All manure, bedding, and refuse from manger and feed box was collected daily and stored in a water-tight covered container (a galvanized-iron bucket), and disposed of by burning.

One attendant for each animal was provided for the first 30 days, after which not to exceed five animals were placed in charge of one attendant when all animals of the group had been in quarantine 30 days and none of them presented symptoms or other signs of communicable disease at any time since entering quarantine in France. The attendant for a group was selected for his trustworthiness and efficiency and was not changed unless absolutely necessary. The principle of separate stall, equipment, individual grooming kit, watering bucket, etc., and freedom from direct contact between any two animals was as strictly observed as when each animal had an individual attendant.

All animals were inspected at least once daily by a veterinary officer. A veterinary officer was on duty at quarantine at all times. Thorough physical examination of all animals was made weekly and report of this examination and of any unusual occurrence during the preceding week, including results of all laboratory examinations, forwarded to the Surgeon General. Complete clinical record was kept of each animal during the entire quarantine period.

All animals received a mallein test within 21 days of the date of arrival and again 21 days prior to release. Blood examinations for piroplasmosis, trypanosomiasis, and for any other suspected communicable disease was made at three different times during quarantine and at any other time deemed necessary. Specimens for the regular examinations were taken immediately upon arrival, on the 21st day after arrival, and on the 21st day from the date of expiration of the quarantine period. The specimens were examined at the Army Laboratory, Philadelphia, and at the laboratory of the Bureau of Animal Industry.

In addition to the regular tests prescribed the following special examinations were made: Eight animals were tested for trypanosomiasis by both the Army and Department of Agriculture laboratories in September, October, and December, 1919, and January and February, 1920. One private animal finally gave a positive reaction and was destroyed. Three animals presenting clinical symptoms of ulcerative lymphangitis were given the toxin-antitoxin test and one public mount reacted and was destroyed. One private mount was tested for mange in July, August, September, November, and finally in December the mange mite (*Sarcoptes communis*) was demonstrated, and the animal was destroyed as incurable. Skin scrapings from four other animals were examined in January, February, and March, 1920, but mange mites were not demonstrated. Three animals were tested serologically for glanders in January, and 21 days later in February, but were negative.

The adoption of the foregoing precautions was eminently justified in view of the very positive danger of introducing serious disease among the animals of the United States from parts of Europe where such diseases are prevalent. So far as known, this danger has been wholly eliminated through the operation of the quarantine.

Service in Departments and Overseas.

SOUTHERN DEPARTMENT.

The service in the Southern Department has us usual been the most exacting because of the extensive use of mounted troops on border duty. There were 24 stations, including the department laboratory, with a total of 59 officers assigned on June 30, 1920. Of these, 12 were regular and 47 temporary officers. The veterinary assistant to the department surgeon reports:

During the first six months of 1919 there was an epizootic of glanders This condition has been stamped out by careful mallein testing and isolation, and at the close of the year no known cases of glanders existed in the department. There has been a considerable amount of dermatitis gangrenosa at both remount stations due to the inclement weather and consequently muddy corrals. It is believed that this condition is now under control. At present the cause of disability among animals is very largely confined to minor wounds and injuries, which are always present with mounted organizations.

CENTRAL DEPARTMENT.

Service was maintained at 14 stations, including the department laboratory, with a total of 44 officers, of whom 9 were regular and 35 temporary.

WESTERN DEPARTMENT.

Service was provided at 6 stations with 13 officers, of whom 4 were regular and 9 temporary.

EASTERN DEPARTMENT.

Service was provided at 12 stations by 17 officers, of whom 5 were regular and 12 temporary. Veterinary assistants to the department surgeons were assigned to the last three named so late in the year as to preclude any report on the veterinary service.

NORTHEASTERN DEPARTMENT.

Service was maintained at 2 stations by 2 regular officers.

SOUTHEASTERN DEPARTMENT.

Service was provided at 9 stations by 30 officers, of whom 6 were regular and 24 temporary.

PHILIPPINES DEPARTMENT.

Ten officers were on duty, of whom 6, including the veterinary assistant to the department surgeon, were regulars. This officer reports as follows:

During the past year veterinary officers have been stationed in Manila, Fort William McKinley, Camp Stotsenburg, Tientsin (China), and Tsingtau (China). Therefore the sanitary work incident to the veterinary service has been under the supervision of veterinarians. These officers have also furnished professional services in response to calls from Fort Mills, Camp Eldridge, Camp Nichols, Camp John Hay, and Pettit Barracks, where the animal strength has been comparatively small and for which there is no provision other than the detailing of enlisted men of the corps.

Owing to the organization of the veterinary service to meet the demands of the World War, many changes in the commissioned personnel have been made. On August 20, 1918, a veterinary officer reported to the department surgeon as his assistant in organizing and coordinating the veterinary service. During this period 10 officers have been returned to the United States, and 8 have reported for duty. Prior to July 10, 1919, there were no enlisted men of the Veterinary Corps in this department. The enlisted personnel, however, has gradually increased, through transfer, enlistments, and new arrivals from the United States, until a total of 58 has been reached.

The most prevalent communicable disease has been glanders. Efforts in the control of this disease consisted in the detection of the positive cases through the agency of mallein, destruction and cremation of affected animals, quarantine of contacts and exposed animals, and frequent disinfection of infected stables, equipment, utensils, etc. Until October 14, 1919, the ophthalmic method of applying the mallein test was employed, and during this period 8,225 animals were tested and 25 were destroyed as positive reactors. Among these were 35 doubtful reactors, 10 of which proved positive to the complement-fixation and agglutination tests. Since the above date the intradermic method has been introduced and practical demonstrations have been given to all veterinary officers in the department, except the one on duty with the China expedition at Tientsin, China. Of the 1,525 animals subjected to this method 10 gave positive reactions. Of the 5 doubtful reactions 1 proved positive to the serological tests.

The tabulations given below will be of interest in comparing the two methods of administering mallein:

Test used.	Animals tested.	Positive reactors.	Doubtful reactors.	Animals destroyed.
Ophthalmic	8,225	14	35+	14
Intradermic	1,525	10	5++	10
Serological	35+	10	.....	10
Do	5++	1	.....	1

Sporadic cases of epizootic lymphangitis and dhobie itch have occurred from time to time at Camps Stotsenburg and Eldridge, Forts William McKinley and Mills, and the Land Transport Corral. Prompt sanitary and police measures were instituted, and as a result there were only a total of 17 cases of lymphangitis and 37 cases of dhobie itch treated.

An outbreak of surra developed at the Land Transport Corral, in which there was a loss by destruction of three animals.

Both ante and post mortem meat inspection has been conducted at Tsingtau, China, where the meat supply for the department, including the China expedition and the American expeditionary forces in Siberia, has been obtained. All of the meat, poultry, fish, eggs, etc., received at Manila for storage has been inspected at time of receipt and before issue to the contiguous commands, including the Army transports, which take on fresh supplies at this port. Likewise the sanitary conditions under which these products are stored and handled at this end and other commands have been under the supervision of veterinary officers.

No inspection of dairies or dairy products other than the condensed milk, butter, and cheese received from the United States and Australia, has been conducted, since local dairy products are not used in this department.

HAWAIIAN DEPARTMENT.

Six officers were on duty, of whom four, including the veterinary assistant to the department surgeon, were regulars. This department has been practically free from communicable diseases of any kind.

PANAMA CANAL DEPARTMENT.

Three officers were on duty, of whom two, including the veterinary assistant to the department surgeon, were regular, and one a retired veterinary officer.

SERVICE OF AMERICAN FORCES IN GERMANY.

During the months immediately following the signing of the armistice the veterinary service of the American Expeditionary Forces really reached its stride. The cessation of hostilities and the occupation of fixed training areas reduced the number of casualties and permitted a systematic elimination of the sick and their proper hospitalization. The excellent work of the chief veterinarian was beginning to bear fruit. The return of divisions to the United States released veterinary personnel which was used for reinforcing the hospital strength, never adequate for the tremendous burden placed upon it. The maximum veterinary personnel was reached February 22, 1919, with 839 officers and 9,701 enlisted men. The number of animals reached its maximum of 192,000 about January 1, 1919, and decreased thereafter rapidly, being about 30,000 on July 1, 1919. It was necessary to dispose of the animals in France, and

large numbers were retained in hospitals until they were in suitable condition for sale.

The hospital units sent from the United States were assigned to stationary establishments, in many instances of a capacity far in excess of that for which they were organized. The enlisted personnel was increased by men from labor battalions, Cavalry regiments, remount squadrons, etc. On March 1, 1919, there were 20 such veterinary hospitals, with a total capacity of 25,360 patients. Their location and capacity were as follows:

St. Nazaire	3,000	Jeanne d'Arc	1,000
Coetquidan	2,160	Neufchateau	1,700
Carton Blanc	950	Claye Souilly	1,200
Camp De Souge	1,000	Bourbon les Bains	1,250
Gievres	2,000	Commercy	750
Nevers	1,000	Lux	700
Neuilly l'Eveque	1,200	Longuyon	1,200
Triconville	1,350	Verdun	2,000
Traveray	1,000	Grosrouvers	300
Valdehon	1,300	Wionville	300

After April 1, 1919, the hospitals were rapidly broken up and the personnel sent home. On September 1 there were 19 officers remaining, with 18,280 animals, and the officers were still further reduced by June 30, 1920, to 9, of whom 5, including the chief veterinarian, were regular and 4 temporary. This includes one officer sent overseas with the Olympic team in June, 1920, to maintain the necessary service, including quarantine regulations, for 16 animals selected for competition in the events and to return to the United States under special arrangements with the Department of Agriculture. One of the officers with the American forces in Germany is on duty with the American Polish Relief Expedition at Warsaw, Poland, and the chief veterinarian reports that practically the entire time of one is occupied with the inspection of meats. One officer was detailed to Bordeaux, France, March 15, 1920, for the purpose of checking and receiving hay from the French Government for the American forces. He is still on this duty. One veterinary officer was designated to accompany a Cavalry officer to Budapest, Hungary, for the purpose of purchasing animals. No purchases were made, but the officer detailed had the privilege of seeing some of the best horses of Germany, Austria, and Hungary.

So far as can be learned from existing records, the casualties among veterinary personnel in the American Expeditionary Forces to date have been:

	Officers.	Enlisted men.
Killed in action or died of wounds	1	5
Died result of accident	1	3
Died of disease	8	94
Severely wounded in action	1	5
Missing	0	1

SERVICE OF THE AMERICAN EXPEDITIONARY FORCES, SIBERIA.

The veterinary service was maintained until the expedition was broken up in April, 1920, and practically all the animals shipped to Manila. Health conditions were at all times excellent with no cases

of communicable diseases reported. The following extracts are from the report of the chief veterinarian:

A captain of the Veterinary Corps, accompanied by civilian farrier, arrived at Vladivostok, Siberia, with the 27th and 31st Infantry on August 15, 1918. Upon arrival, the stock of the expedition, consisting of 130 head of horses and 340 mules, was debarked and picketed at the customhouse docks. A careful examination of the animals showed them to be in excellent condition.

The stock was kept on the customhouse docks for six days and then transported to the compound inclosing the base and line of communication. On September 6, 1918, the U. S. A. T. *Warren* arrived with 72 head of horses and 185 head of mules, which were also found upon examination to be in good condition. These animals were all kept in the base compound until the arrival of the U. S. A. T. *Crook* on October 18, 1918, which debarked 125 horses and 202 mules, also in good condition.

On August 26, 1918, the 27th Infantry left for station and were assigned 28 horses and 186 mules. The civilian farrier accompanied the stock. The remaining animals were assigned to the 31st Infantry, Field Hospital No. 4 and Ambulance Company No. 4. The 27th Infantry arrived at Kharbarovsk, Siberia, September 17, 1918, after a hard trip from Vladivostok, which included an almost impossible 7-day hike from Sviagino to Ussuri, Siberia, the balance of the trip being made by train. The stock on the trip was given veterinary attention by the civilian farrier, and by the time the veterinarian arrived in Kharbarovsk, October 7, 1918, was practically recovered from its effects. Prompt attention was given to sanitation, proper stabling, grooming, and care of the animals. Arrangements were made for running water in three of the stables, leaving the animals from the supply company to be watered from the large trough in the compound. This water is piped to a depth of 12 feet underground and is pumped by the local authorities from Ussuri (Red) River. The animals became acclimated rapidly, putting on their winter coat of long hair in short order. The barns were kept well ventilated and as cool as possible, but still remaining comfortable. Little sickness occurred among the animals, a few cases of pneumonia at the beginning of the severe weather and some strangles lately, the latter due no doubt to the fact that much of the contract work is done by Russians using Russian horses and the impracticability of establishing a quarantine camp. Also there is much travel by the Japanese troops through the camp.

Discipline was excellent at all times and court-martials were infrequent. No desertions have occurred to date and men seldom if ever absent themselves without leave.

A stone building 70 by 30 feet, heated by coal stoves, has been furnished as a hospital and provision made for dispensary and operating room. Six box stalls, some with dirt and some with board floors, were available. The hospital building was well lighted and ventilated. A forage shed 14 by 14 feet was attached and a convalescent yard 150 by 200 feet surrounded the hospital. Five shoeing shops are scattered throughout the expedition and no difficulty has been encountered in this respect. Equipment is adequate.

For the first seven months following the arrival of the expedition, feed, such as hay, oats, and bran, was obtained from the United States, but since that time hay and oats have been obtained locally, but trouble has been continually encountered since the start of the practice of local purchase. The grade of hay and oats is of a poor quality and at times the problem of obtaining sufficient quantity has been very great. The bulk of the forage was stored on a platform raised about a foot off the ground and covered with a tarpaulin. Oats and bran are kept in a storehouse and shipped as required. Very few violent cases of colic have been encountered. Salt is always accessible to the animals. Manure is hauled away daily and burned.

In Vladivostok very few cases of communicable diseases have been encountered. While in Kharbarovsk several cases of strangles in a mild form occurred in the spring of 1919. The animals were isolated in a corral. No loss of stock was caused from this source. All animals admitted to the hospital were given a rigid examination and isolated from 18 to 20 days if symptoms of any communicable disease were observed. Sick animals were properly fed, exercised in the hospital paddock, and groomed daily. Fresh air, clean water, and cleanliness in the stalls and mangers was insisted upon.

The water supply for soldiers at Vladivostok is obtained from a distilling plant at the base and is distributed by means of water carts to the various parts of the encampment. An ample supply for all purposes is furnished daily. The animals are watered with the water obtained from Uda River, which runs about 300 feet from the stables, and is piped to stationary troughs built for that purpose. These troughs are disin-

fected twice a week in the summer months. During the winter months the stock are watered from buckets. Animals are not washed.

Fourteen animals have died in the expedition between the dates of arrival and June 30, 1919—4 by train accident, 1 destroyed on account of a broken back, and 9 from various causes. No animals have been lost as a result of communicable diseases. No glanders has been found to date (June 30, 1920). All animals have been tested and all results found negative. Animals coming in from isolated districts are isolated and given the mallein test.

All medical supplies are obtained from the medical supply depot at the base, and from the start the service has been excellent and all supplies requisitioned for have been promptly furnished, and an adequate supply of surgical instruments is always on hand.

Up to June 30, 1919, 572 sick animals have been treated and, with the exception of 9, all were returned to duty.

All meats for the expedition were procured from Tsingtau, China. The carcasses are reexamined after slaughter and placed in cold storage till forwarded. Meat was shipped by Government transports and was inspected upon its delivery before being placed in cold storage until issued. No meats were procured locally. No fresh milk was used by the expedition. Rejected meat was surveyed in the usual manner and disposed of by burning.

Meat was issued to organizations daily, except Sunday, and inspected while being weighed and issued, by a veterinary officer. No orders have been issued by the commanding officer concerning the inspection of meat and meat products, that being left to the chief veterinarian. Cold-storage meats are kept in a room rented from an English firm. Cold-storage room is ample, and refrigerator cars are used to ship meats to outlying stations. Cured and canned meats are stored in warehouse and thoroughly inspected before issue by a veterinary officer. Warehouses are adequate for all purposes and are in good repair.

Cooperation with the quartermaster has at all times been good. No friction has occurred and no conflict of authority has been encountered with the camp sanitary officer.

No loss of meats has occurred, except through improper storage on board the transports, while being transported from Tsingtau to this station, or the improper icing of refrigerator cars. Meats and meat products issued by the quartermaster have been satisfactory.

An interesting report on a shipment of 225 mules and 50 horses was also submitted:

On January 24, 1920, the animals of the 27th Infantry, in charge of a veterinary officer, were loaded in Russian box cars, the dimensions of these being about 20 feet long, 8 feet wide, and 7 feet high. Fight animals were loaded to a car. Because of the hostilities in the country through which we were to pass the shoes were not removed. The animals were fed and watered once a day. On several occasions they refused the water on account of its being too warm. Hay was fed when it could be secured at the different stations. The animals were taken from the cars twice in a period of 26 days, once at Manchuria station and once at Kharbin, Manchuria. The range of temperature was from 12° below zero to 69° below. Much wind was encountered in crossing the Gobi Desert. Upon arrival at Vladivostok, a distance of about 1,750 miles, the animals were found to be in good condition, only 11 surgical cases resulting on the entire trip, and none of these of a serious nature. The number of animals on the trip was 283—225 mules and 58 horses.

It should be particularly noted that these animals were en route for a period of 26 days and were fed and watered once a day, were unloaded twice, and subjected to an extreme range of temperature of from 12° to 69° below zero and to severe winds. On arrival at Vladivostok there was no sickness other than 11 surgical cases, and nothing of a serious nature.

MEAT AND DAIRY HYGIENE IN THE UNITED STATES.

In addition to the work done at the general supply depots (q. v.), the veterinarian of every station is required as a part of his routine duties to inspect the meats and dairy products received and issued, the establishments in which such supplies are handled or stored and

the dairies and milk herds. Supplies handled by the quartermaster are inspected at the commissary and those bought locally by organizations are usually examined at some convenient central point of delivery, if not prior to leaving the local establishment. Circular Letter No. 40, for the guidance of veterinary personnel in the conduct of meat and dairy inspections, assembles these duties in one place for the first time and establishes them on a working basis.

The regular rendition of reports makes it possible to obtain a clearer view of the extent of this phase of the veterinary service. For purposes of convenience the statistics are shown in two groups, one covering the activities of the service at purchasing points, i. e., at general supply depots, and the other at camps and posts. The former group, therefore, covers inspections made when the supplies were first acquired by the Government and the latter when they were received at stations and when issued. Necessarily in many cases the inspections are repeated two or more times. It should further be noted that not all the purchasing is done at general supply depots and the second group of statistics includes supplies purchased from local dealers and delivered at stations. The careful examination of this class of supplies, which have received no prior Government inspection, is an important part of the duties of the station veterinarian.

Inspected at purchasing points and camps or posts, January to December, 1919.

Articles.	Purchasing point.	Camp or posts.	Articles.	Purchasing point.	Camp or posts.
	Pounds.	*Pounds.*		*Pounds.*	*Pounds.*
Beef, fresh	80,155,713	154,839,941	Bacon, breakfast, canned	516,039	136,570
Beef, frozen	62,927,550	44,671,301	Beef, corned, canned	53,551,581	3,037,660
Mutton, fresh	191,895	1,388,681	Beef, fresh roast, canned	31,799,672	451,743
Mutton, frozen	2,100,729	6,388,790	Beef, sliced, canned	279,338	121,928
Pork, fresh	3,416,401	5,872,141	Beef, tongue, canned	212,887	25,004
Pork, frozen	6,595,057	1,183,225	Ham, canned	9,539,157	24,600
Turkey, fresh	243,208	481,204	Hash, corned beef, canned	21,432,475	674,425
Turkey, frozen	239,877	349,309	Sausage, pork, canned	2,336,858	106,421
Veal, fresh	397,056	3,158,425	Sausage, Vienna, canned	2,294,120	274,496
Veal, frozen	116,054	264,426	Turkey, boneless, canned	136,483	3,704
Edible organs, fresh	126,203	1,041,095	Lard, issue	1,599,127	1,917,614
Edible organs, frozen	179,192	1,034,771	Lard, substitute	2,627,585	4,107,681
Sausage, pork, fresh	265,158	2,663,425	Oleomargarine	1,472,091	1,863,062
Miscellaneous pork products	765,463	2,416,827	Butter	2,719,016	4,794,845
Bacon, issue	27,060,902	4,852,895	Cheese	3,932,933	1,498,503
Bacon, breakfast	10,169,275	1,547,994	Eggs	2,543	2,802,161
Beef, salt	82,579	38,722	Fish, canned	20,625	572,783
Ham, dry-cured	268,226	496,544	Fish, fresh	100,355	1,848,350
Ham, sugar-cured	5,964,327	5,841,880	Milk	305,134	1,899,920
Pork, salt	26,343	93,240	Miscellaneous meats	314,202	496,465
Sausage, smoked	1,190,912	3,450,836	Oysters	163,597	199,976
Shoulder, smoked	147,405	240,660	Poultry	2,263,016	2,832,808
Bacon, issue, canned	29,710,074	1,134,870	Total	369,958,433	273,143,915

In addition to the above, the following number of carcasses was inspected at purchasing points:

Cattle	13,357
Hogs	1,414
Sheep	407
Total	15,178

Rejected at purchasing points and camps or posts, January to December, 1919.

Articles.	Purchasing point.	Camp or posts.
	Pounds.	*Pounds.*
Fresh meat products, (beef, veal, mutton, pork, edible organs, etc.)	8,543,767	595,614
Cured meat products (ham, bacon, sausage, etc.)	769,947	96,262
Canned meat products (beef, pork, milk, fish, etc.)	1,279,839	182,727
Lard, butter, cheese, etc	114,672	58,091
Miscellaneous meats	58,528	31,239
Total	10,766,753	963,933

Causes of rejection.

	Purchasing point.	Camp or posts.
	Pounds.	*Pounds.*
Abscesses		145
Broken bones and bloody	350	
Bruises	943,898	45,900
Contaminated and decomposed	281,922	233,240
Defrosted	586,356	34,116
Leakers and swellers	1,286,165	89,364
Maggots, fiber bugs, skippers, infestation	32,679	10,593
Moldy, sour, and slimy	621,239	211,328
Peritonitis		500
Rat eaten	1,655	2,486
Seedy	1,532	
Scrap and trimmings	508	
Stale	227,839	748
Tuberculosis		287
No cause given	107,159	34,912
Noncompliance with specifications	6,681,451	300,314
Total	10,766,753	963,933

In addition the following number of carcasses were rejected during the year at purchasing points:

Cattle	350
Hogs	85
Sheep	34
Total	469

The causes of rejection were:

Abscesses	36
Bruised	16
Fever	1
Foot-and-mouth disease	35
Jaundice	2
Lumpy jaw	1
Measles	4
Neck tumors	1
Pyemia	1
Rinderpest	1
Pleurisy	1
Ulcers	2
No cause given	8
Noncompliance with specifications	360
Total	469

The Meat Inspection Service in the American Expeditionary Forces.

With the exception of the first few divisions arriving overseas, each division had a meat inspector, an officer of the Veterinary Corps who had received special training in military meat inspection. There is no record that the Services of Supply availed itself of this trained force of meat inspectors to inspect the vast refrigerators and storehouses erected in the intermediate and base sections.

But few divisions took advantage of the service of these specially trained officers, and submitted their meats and meat food products to an inspection in a regular manner up to the entrance of the Third Army into Germany. Less than 10 per cent of the divisions had a meat inspector on duty at the railheads where the rations were received and issued. On account of other activities of momentary importance there was no time found to develop this service to the state of refinement it deserved, and the meat inspectors were, as a rule, used to assist the division veterinarian in his supervision of the evacuation of animals.

Upon the arrival of the Third Army in Germany, the divisional meat inspectors were placed on duty at railheads and inspected and supervised the issue of meats and meat food products to the organizations. Some of these inspectors included the inspection of forage in their activities.

The supply base for the Third Army, in Germany, was established at Antwerp and supplies were transported by rail or by lighter up the Rhine River to Bendorf, just below Coblenz. In general the meats and meat food products issued to the troops were in excellent condition, but it was thought advisable to send two veterinary officers to the base port to inspect the cold-storage plants and supplies in stock.

On March 10, 1919, a cold-storage plant was secured at the Hook of Holland, the capacity of which was 6,600 tons. Up to July 9, 1919, four ships had arrived and unloaded the following:

	Pounds.
Boneless beef	7,714,025
Carcass beef	12,361,698
Pork loins and shoulders	938,464
Chicken	558,168
Mutton	291,540
Apples	512,820
Oleomargarine	281,248
Butter	164,720

Supplies were shipped daily from this plant to Bendorf, Germany. The average weekly shipment for the months of May and June was 307 tons. The stock remaining was stored in four large "cells." The meat was all well sacked or boxed, frozen hard, and general condition good.

The following meats and meat food products in storage at Antwerp were inspected and found well packed and in excellent condition:

	Pounds.
Bacon, crate	19,462
Bacon, tin	1,874,520
Ham, issue	491,465
Corned beef	890,899
Corned-beef hash	612,078
Fresh beef, roast	862,961
Lard	122,040
Lard substitute	182,753
Sausage, pork	1,045,882
Butter	109,070
Oleomargarine	586,962

The following forage was also inspected at Antwerp:

	Pounds.
Hay	253,216
Oats	9,992,840
Bran	6,601,260

So far as shown by available records, the foregoing constitutes the meat-inspection activities of the Veterinary Corps of the American Expeditionary Forces.

Supplies and Equipment.

Veterinary supplies have been handled in common with all Medical Department supplies and every effort has been made to correct serious shortages which have been reported. All veterinary supply tables and the equipment tables for veterinary organizations are undergoing a complete revision with an underlying attempt to standardize, as far as practicable, veterinary with medical and dental supplies.

Hospital Construction.

The objection to the location of the only veterinary hospital for a camp in the remount depot has been emphasized by the closing of these depots one after another, including its hospital, leaving the camp with meager, if any, hospital facilities. At all these places some sort of improvised hospitals have been secured subsequently. They are crude and inadequate with few exceptions. Complaints of the inadequacy of hospitals and of facilities for the isolation and quarantine of sound animals suspected of infection with communicable disease have been received from the permanent remount depots and some of the larger camps. This office recommended suitable amendment of the appropriation bills to include veterinary hospital construction in the appropriation "Construction and repair of hospitals," but the change failed to secure the approval of the War Department. Any veterinary hospital construction or repairs thereto must consequently be provided for in such quartermaster funds as may be available. It is neither economical nor humane to attempt to care for the sick animals of the Army without veterinary hospitals. An efficient veterinary service demands a place where the sick can be segregated from the well and receive the surgical, medical, and other special treatment most conducive to prompt recovery. Since the veterinary service pertains to the Medical Department it is proper

that the location, arrangement, and construction of such hospitals be based on the recommendations of the Surgeon General and that funds for such work be made available to him for allotment.

Sanitation.

The application of the principles of veterinary preventive science to Army conditions is not clearly comprehended by all. This is true in a lesser degree as regards that part of veterinary sanitation dealing with the inspection of meats and dairies since it directly concerns human health, but it is particularly true of the sanitation of animals. The first object prescribed for the Veterinary Corps is to protect the health and preserve the efficiency of the animals in the Army (par. 4, S. R. No. 70). Broadly speaking, there is nothing in the environment of the Army animal or in his handling by man from the time he is offered for purchase until he is eliminated which does not bear on his health or efficiency. Within these limits therefore will be found the field of activity of the Veterinary Corps and it is one so broad and presents so many opportunites for valuable service that it is not surprising that the Army as a whole has thus far been unable to view it in its true perspective. The treatment of the sick, while important and necessary, must become a minor consideration when compared with the protection of the health and preservation of the efficiency of the well. Here the Veterinary Corps finds its greatest opportunity and herein will it justify its development and operation as a valuable part of the military machine.

It becomes then the object of the Veterinary Corps to secure and maintain the highest possible degree of physical efficiency among Army animals. This can be accomplished only through the intelligent and sympathetic cooperation of the line, since the administrative care of sound animals is basically a function of the line officer and the veterinary officer serves only in the capacity of an advisory staff officer. The importance of a clear definition and proper comprehension of the extent and responsibilities of the veterinary service on the part of all officers is readily apparent.

The veterinary officer investigates and advises with reference to the housing, restraint, grooming, feeding, shoeing, exercising, and fitting of equipment in the effort at all times to secure the correction or defects which if uncorrected will lower the efficiency. There is nothing in the daily existence of the animal with which the veterinary should not be thoroughly familiar, and because the subject is dumb and can not voice its needs the importance of this intimate knowledge is all the greater.

The importance of these duties and the fact that they naturally devolve on the veterinary officer as the only officer of the Army possessing the basic educational qualifications essential to their proper performance was fully grasped in the preparation of Special Regulations No. 70. These duties, as prescribed therein for the division and other unit veterinarians, are specific and inclusive. The need in divisions or stations of animal inspectors who interest themselves in conditions concerning the efficiency of the animals, as was the usage in the American Expeditionary Forces in Germany, is merely an example of useless duplication of personnel unless indeed veterinary officers are wholly unavailable. The inspection of animals is the

most important duty in which the veterinary officer must be proficient to meet his official obligations. He must inspect them systematically and thoroughly and under every conceivable condition to which they may be subjected. Preeminently he should be the one individual of the staff of the commander who possesses positive knowledge of every detail of animal management. One of the basic principles involved in the assignment of a veterinary officer to department headquarters is the necessity of having available at such headquarters a professional expert with the necessary information or the facilities and ability to obtain it.

Without doubt the inspection of animals for condemnation is a legitimate function of the Veterinary Corps and will some day be so defined. This can not be expected until the animal is regarded less as a piece of machinery and more as an animate being with a life history, possessing qualities, exhibiting tendencies and of an economic and monetary value which place it in a peculiar and special class, subject to peculiar and special treatment, provided the Army is to fully realize its capabilities and secure the most utilitarian results for the financial outlay invested. The need of much more careful and thorough veterinary investigation into the whole subject of animal serviceability was made the basis of recommendation requiring a complete physical examination of each animal prior to its submission to an inspector and the necessary amendments to Army Regulations. This recommendation failed to receive the approval of the War Department except in a limited sense requiring that veterinary officers be consulted in the condemnation of animals.

Undoubtedly sanitary conditions among the animals have improved. This office does not receive the routine sanitary inspection report made by the veterinarian of a station and is therefore unable to submit any definite information.

The prevention of death and disease among newly purchased animals from the time of acquisition, during shipment, and after arrival at a depot has received solicitous attention. Sanitary conditions in stockyards and stables throughout the country where such animals are assembled come under the jurisdiction of the Bureau of Animal Industry, which maintains inspectors for this work. Such places are usually infected with the organisms causative of various communicable diseases. Veterinary officers on duty with purchasing boards, and in purchasing zones, are required to investigate local sanitary conditions and may recommend the termination of purchasing at places where defects are not promptly corrected, but their sphere of activity is necessarily limited. Likewise these officers inspect the cleanliness, sanitation, and state of repair of stock cars presented for animal shipments. The 28-hour law requires that all animals in shipments shall be unloaded for feed and water not less than once in 28 hours, or 36 hours provided a release is signed by the attendant. Consequently neither forage nor water is placed in the stock car. No railroad can be expected to unload the animals any oftener than it is compelled to do. As a result numerous shipments have been reported in which the animals have been crowded into cars in transit for several intervals of 36 and more hours in one journey without food, water, or rest. It is not to be wondered at that such animals are unloaded at their destination exhausted, emaciated, and their vital resistance so lowered that they are ready

victims to communicable diseases to which in most cases they have already been exposed. There is nothing to be said in favor of this practice. The Government suffers a material and largely avoidable financial loss thereby, both in dead animals and in prolonged periods of sickness and disability. Furthermore, the practice is inhumane and unjustifiable. There is no more reason for starving animals for one or two days than there would be for starving men under similar circumstances. The animals are dumb and can not protest, but it is felt to be the duty of this office to go on record as most emphatically opposed to such practices. It is believed that not only should all shipments be unloaded at 28-hour intervals for food, rest, and water in suitable yards, this interval to be exceeded under no conditions, but that no animals should be shipped in cars unprovided with adequate supply of both forage and water. The alleged convenience or the whims of railroad officials should not be permitted for a moment to measure against the penalizing of the Government financially and the infliction of unnecessary and extreme suffering on dumb animals.

Communicable Diseases.

The main causes of communicable diseases were enumerated in the report for the fiscal year ending June 30, 1918. The corral system of handling animals furnished the most ideal conditions for the spread of diseases. Overcrowded, insanitary corrals divided by hayracks and single fences which permitted contact between animals in contiguous corrals instead of double fences with ample space between is the rule and is an important factor in the spread of diseases of this nature, while the overcrowding is conducive to serious injuries and difficulty in detecting the sick in the early stages. As the number of animals on hand decreased by sale during the year 1919 from about 275,000 to 80,000, there occurred a corresponding decrease in the sick and injured rate and improvement in sanitary conditions.

GLANDERS IN THE UNITED STATES.

Glanders has continued to occupy the place of first importance. Clinical glanders is rare, undoubtedly due to the activity in mallein testing. Practically every animal received one or more inoculations during the year. The intradermic test has come into general use and the training of veterinary officers in its application and interpretation has progressed satisfactorily. This is strictly necessary, since in the absence of clinical symptoms animals are destroyed on positive mallein reactions or laboratory reports, and accuracy is of prime importance in the conservation of horseflesh. The ophthalmic test has been entirely replaced except at time of purchase, when its use is permitted because of the shorter period necessary to arrive at a final opinion.

At the present time the following protective measures are in operation:

The green animal before final acceptance must pass a negative test. On his arrival at a depot he is put in quarantine for 21 days and given an intradermic test. Should this prove negative he is released at the termination of the quarantine period. If it is positive he is destroyed and the carcass disposed of in a sanitary manner,

measures of disinfection are carried out and all animals of the same lot are considered as contacts, continued in quarantine and tested at intervals of 21 days as long as additional positive or suspicious reactors are found among them.

Should the first intradermic test have been suspicious or indeterminate, the test is reapplied in the opposite eye within 48 hours and a specimen of blood is sent to the laboratory, while contacts are handled exactly as if the first test had been positive. A positive laboratory report is accepted as a cause for destruction, a suspicious or negative laboratory report is reason for continued isolation and retesting. No serological tests are made except subsequent to a suspicious intradermic test. In other words, the two tests are made to support each other, except that when either one is frankly positive, further procedure is deemed unnecessary.

The testing of conditioned animals is authorized whenever the veterinarian deems it necessary, and it is not contemplated that any animals shall go untested for more than a year. Animals are also tested when turned in to a depot, when sent to a veterinary hospital, and when transferred from one station to another, provided they have not been tested within 21 days. Reactors are handled as with green animals.

No animal is sold without a negative mallein test. The disposal to the public of nearly 180,000 animals during the year 1919 without evidence of a single glandered animal being allowed to reach civilian hands is an achievement of which the Veterinary Corps is justly proud, and in view of the widespread distribution of glanders in the Army at that time is one which speaks well for the reliability of the mallein test.

That the measures outlined above will practically eliminate glanders from serious consideration there appears to be no reasonable doubt. This belief is supported by the figures which follow.

Reports received from the United States proper show a total of 746,677 tests during the year, 678,871 of which were intradermic. Of the 67,806 ophthalmic tests 66,778 were made prior to July 1, 1919. A total of 2,051 retests were made during the year. An average of 14,359 tests were made each week, exclusive of retests.

As a result of the 746,677 tests and 2,051 retests, 1,138 animals were destroyed. The proportion of animals destroyed to the total strength of the Army animals (based on the average of 116,000) was a weekly average of 0.15 per 1,000, or about 1 to every 6,500 animals. Approximately one-eighth of the Army animals were mallein tested each week, and based on the total deaths there was an average of 21.9 animals destroyed each week.

An outbreak at Fort Bliss, Tex., caused the destruction of 647, or about 58 per cent of the total. It is interesting to note that during the last six months of the year only 17 glandered animals were destroyed.

Tests were applied to 457,651 horses and 289,026 mules, as a result of which 628 horses and 161 mules were destroyed. There were 1,643 retests applied to horses and 408 to mules, as a result of which 282 horses and 67 mules were destroyed.

Considering the horse and mule group separately, it is found that, based upon a total strength of each group, the average number of horses destroyed was 13.26 per 1,000 in the horse group and the

average number of mules destroyed in the mule group was 4.75 per 1,000.

An autopsy is made on all animals that show no positive physical symptoms of glanders but are destroyed as a result of the mallein or serological tests. Of these 944 were reported as positive, 66 as negative, and 99 as doubtful. In a certain small percentage of cases with clinical signs both the intradermic and serological tests have been negative. In other words, actual infection seems to have produced immunity to the reaction, allowing for errors of technique in applying and reading the test. The relative frequency of the organs involved is shown below.

Relative frequency of organs involved, as shown on 1,048 post-mortems positive to glanders.

[Includes autopsies performed in 1918.]

Location of lesions.	Number.	Per-centage.	Location of lesions.	Number.	Per-centage.
Lungs	864	0.8174	Intestines	13	0.0123
Lymph glands	346	.3272	Nares	7	.0069
Liver	134	.1266	Sinuses	5	.0047
Septum nasi	76	.0719	Larynx	4	.0037
Spleen	75	.07	Ovaries	4	.0038
Pleura	33	.0312	Heart	3	.0028
Skin	29	.0274	Kidneys	3	.0028
Trachea	26	.0246	Bronchii	2	.0019

The original source of infection was not determined in all cases nor can such source be easily traced as a rule. It is known that glanders existed among Army animals, especially those used on the Mexican border in 1916. Accurate data as to the extent of the disease among public animals are not believed to exist.

In addition to the statistical report rendered each week, a special weekly report is required from each station from the discovery of the first case of glanders until repeated tests proved presumptively that the disease has been eradicated. These reports are of great value as they contain data relative to the measures adopted for the control of the disease and indicating whether all preventive requirements are met.

These reports also inaugurated special laboratory investigations, as, for example: It was noted that some veterinary officers were reporting all animals destroyed as positive reactors to the mallein test as showing positive glanders lesions on post-mortem examination. It is conceded by all authorities that it is in some cases extremely difficult if not impossible to demonstrate specific lesions of glanders, particularly in its early stages. The accuracy of such reports was therefore questioned, especially in view of the character and location of some of the lesions reported as glanders lesions. It was noted also that few tissue specimens were being forwarded to the department laboratories for investigation. Instructions were issued to all veterinary officers to send tissue specimens to the laboratory and in no case report an animal as positive on post-mortem examination unless supported by the laboratory findings; in the absence of a positive laboratory report to report the case as doubtful. In this connection it is interesting to note that the laboratories have reported but two tissue specimens as positive to glanders.

It may be pointed out that animals have been destroyed which should have been properly regarded merely as suspects. This may

be true, but a suspect which is actually infected is a source of extreme danger to all other animals, and it is believed to be better to eliminate it after taking reasonable care to arrive at a correct diagnosis than to run the risk of scattering the infection broadcast and eventually causing the destruction of a far greater number.

It is evident that there exist great differences in opinion relative to the interpretation of mallein tests, post-mortem findings, etc. This is to be expected, largely owing to the fact that glanders as a demonstrable clinical entity is relatively rare and there is consequently little or no opportunity for the practicing veterinarian to become familiar with the clinical aspects of the disease.

The following table is a summary of the weekly reports of animals tested, retested, and destroyed:

Date.	Original tests.		Destroyed.		Serological and retests.		Destroyed.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
1919.								
Jan. 3	19,365	15,103	7	3	43	8	9	10
Jan. 10	17,549	9,558	12	.....	42	34	8	4
Jan. 17	22,066	12,643	12	5	69	7	8	1
Jan. 24	21,451	12,487	21	10	83	12	6	1
Jan. 31	27,850	20,534	13	2	63	28	6	7
Feb. 7	25,239	16,182	6	.....	56	23	15	2
Feb. 14	16,336	10,543	4	3	83	14	4	2
Feb. 21	14,399	8,408	8	6	75	7	14	.....
Feb. 28	14,793	7,742	9	1	80	17	4	3
Mar. 7	13,040	8,144	10	.....	79	14	7	2
Mar. 14	11,225	6,058	9	2	38	4	1	1
Mar. 21	18,392	8,784	38	6	95	45	14	2
Mar. 28	10,091	6,780	36	8	60	31	23	2
Apr. 4	15,983	7,024	101	26	84	15	14	5
Apr. 11	12,964	4,398	116	18	150	48	90	13
Apr. 18	20,851	11,842	182	63	53	13	7	2
Apr. 25	11,706	6,224	8	2	92	13	10	2
May 2	15,287	8,925	13	4	131	23	5	2
May 9	7,539	5,049	7	.....	51	4	.....	2
May 16	6,834	4,883	8	1	27	4	9	.....
May 23	5,832	4,418	3	1	29	3	3	.....
May 30	5,003	4,613	.....	.....	.....	.....	10	.....
June 6	8,598	3,378	1	.....	6	.....	.....	.....
June 13	8,988	4,654	1	.....	7	.....	.....	.....
June 20	7,612	4,125	1	.....	10	.....	4	.....
June 27	5,411	3,139	.....	.....	15	.....	.....	.....
July 4	3,684	2,735	.....	.....	7	.....	1	.....
July 11	7,048	3,059	1	.....	3	.....	.....	.....
July 18	3,152	4,804	.....	.....	6	.....	.....	.....
July 25	1,455	2,327	.....	.....	4	.....	.....	.....
Aug. 1	3,047	2,651	.....	.....	7	8	.....	.....
Aug. 8	8,818	7,306	.....	.....	.....	1	.....	.....
Aug. 15	2,043	4,881	.....	.....	2	.....	.....	.....
Aug. 22	3,149	1,985	.....	.....	1	4	.....	.....
Aug. 29	3,567	1,951	.....	.....	4	.....	2	.....
Sept. 5	5,179	1,883	.....	.....	1	.....	1	.....
Sept. 12	6,408	2,402	.....	.....	6	.....	.....	.....
Sept. 19	1,887	1,061	.....	.....	3	5	.....	.....
Sept. 26	3,239	1,970	.....	.....	.....	7	.....	.....
Oct. 3	3,837	3,338	.....	.....	2	7	.....	.....
Oct. 10	3,605	1,507	1	.....	13	.....	.....	.....
Oct. 17	1,723	2,638	.....	.....	1	.....	.....	.....
Oct. 24	3,940	3,137	.....	.....	.....	.....	.....	.....
Oct 31	4,508	4,809	.....	.....	17	.....	1	.....
Nov. 7	2,059	1,888	.....	.....	6	.....	.....	.....
Nov. 14	2,094	2,646	.....	.....	5	.....	.....	.....
Nov. 21	2,639	3,113	.....	.....	6	4	.....	2
Nov. 28	1,622	1,608	.....	.....	9	.....	.....	.....
Dec. 5	3,281	3,379	.....	.....	.....	.....	.....	.....
Dec. 12	5,420	2,744	.....	.....	6	2	.....	.....
Dec. 19	2,671	2,350	.....	.....	8	2	2	2
Dec. 26	3,232	1,236	.....	.....	2	1	4	.....
Total	457,651	289,026	628	161	1,643	408	282	67
	746,677		789		2,051		349	

Total deaths, 1,138.

The tabulation below shows the stations at which one or more animals were destroyed for glanders:

Station.	Cases.	Station.	Cases.
Fort Bliss (remount depot)	321	Camp Shelby	3
Camp Fort Bliss	326	Camp Courchesne	2
Fort Sill	120	Camp Furlong	2
Camp Travis	63	Camp Humphreys	2
Camp Wadsworth	52	Camp Meade	2
Camp McClellan	38	Camp Gordon	2
Newport News	37	Camp MacArthur	2
Camp Cody	35	Camp Devens	1
Camp Douglas	16	Camp Pike	1
Philippines Department	45	Camp Taylor	1
Camp Hill	15	Camp Dodge	1
Camp Lee	10	Fort Huachuca	1
Camp Beauregard	9	Marfa, Tex	1
Camp Bowie	7	Fort Clark	1
Camp Kearny	7	Camp L. J. Hearn	1
Camp Grant	5		
Camp Lewis	5	Total	1,138
Camp Sevier	4		

GLANDERS IN THE AMERICAN FORCES, GERMANY.

The Third Army, or Army of Occupation, was organized after the armistice was signed and marched to Germany, the forward units crossing the Rhine December 14, 1918. The American Forces in Germany were so designated on July 3, 1919.

That glanders existed among the animals of the Army at the beginning of the march was evidenced by the fact that at the first test after completing the march 47 reactors were discovered. Isolated cases were found in a number of organizations, but three definite centers of infection were located, viz, Battery C, 151st Field Artillery, 42d Division; Battery A, 17th Field Artillery, 2d Division; Battery D, 5th Field Artillery, 1st Division.

The intradermic test was required to be made on all animals every 20 days and instructions issued to thoroughly clean and disinfect feeding and watering places. Until stabling could be constructed, many animals were billeted in small, poorly lighted, poorly ventilated stables of the occupied territory, and the public watering places, which are found in all of the small villages usually dirty and moss grown, were often used during the march in spite of all that could be done to prevent it. Consequently the importance of thorough cleansing of such places in enemy territory could not be overestimated. In all cases where reactors were found strict quarantine regulations were enforced.

In the beginning there was great lack of uniformity in the interpretation of the test. On January 28, 1919, a meeting was held in the office of the chief veterinarian at which all corps and division veterinarians and about 50 unit veterinarians discussed the test and its interpretation. Following this, corps and division veterinarians assisted unit veterinarians in interpreting all doubtful cases. The use of this method and the distribution and use of Bulletin No. 16m, General Headquarters, February 25, accomplished much in standardizing the test.

One feature of the disease which is worthy of note was the large number of cases of farcy, especially in those organizations which had

long been affected. The animals of Battery A, 17th Field Artillery, were finally destroyed. The battery had been motorized, and on account of the glanders history and the fact that the animals were badly affected with mange and in poor physical condition it was decided they could not safely be distributed to other organizations. Battery C, 151st Field Artillery, and Battery D, 5th Field Artillery, were isolated and tested until no reactions occurred for two successive tests. The animals were then sold for butchering under inspection. No lesions were found on post-mortem.

Number of animals tested (Jan. 1 to June 30, 1919)	165,955
Number of positive reactors:	
Dec. 1	2
Jan. 3	47
Feb. 7	51
Mar. 2	15
Apr. 4	0

DERMATITIS GANGRENOSA.

This disease has been reported from nearly all sections of the country, although more prevalent at the southern stations. The total number of cases reported in the Army, exclusive of the American Forces in Germany, was 4,566, of which 3,676 were horses and 890 were mules. In addition to the cases diagnosed positively, there is no doubt but that many cases of dermatitis, pododermatitis, and allied foot infections, which cover a group of closely connected conditions and were the cause of high sick rates in many places and resulted in much permanent disability, were due to necrophorous infection either primarily or secondarily. The laboratory findings have generally shown a mixed infection of staphylococci and streptococci, but the predominant organism has been bacillus necrophorus and the common lesions have been characteristic of that organism.

The disease was most prevalent at the remount depots in southern camps now abandoned. Most of these places were extensively infected, and disuse of the corrals was the only practical prophylactic measure. During the months they were in operation the three stations in the United States with the highest admission rate were Camp Beauregard, La., with 585 horses and 125 mules, a total of 710; Camp Hancock, Ga., with 426 horses and 4 mules, a total of 430; and Camp Sheridan, Ala., with 268 horses and 85 mules, a total of 353. These rates were not approached in any northern station, the highest being at Camp Dodge, Iowa, with 91 horses and 30 mules, a total of 121, not taking into consideration the fact that this station was in operation during the entire year.

This infection is shown to be much more common amongst horses than mules in the proportion of about 4 to 1. Two stations however reported more cases in mules than horses, i. e., Camp Jackson, S. C., having 175 mules and 54 horses, and Fort Sill, Okla., with 41 mules and 22 horses. The annual rate of admissions for 1919, irrespective of the number of horses and mules, was 39.15 per 1,000. Of the 4,566 animals admitted 197 died or were destroyed or were otherwise disposed of. On this basis dermatitis gangrenosa is accountable for an annual loss to the Army of 2.61 per 1,000.

These infections are claimed to be most prevalent during cold weather ordinarily, yet in the depots in this country they have increased in numbers and virulence with the summer months. The lesions have varied from local skin necrosis yielding readily to treatment, to the most extensive destruction of deeper parts of the foot and lower leg. The latter cases frequently terminate fatally or in permanent disability.

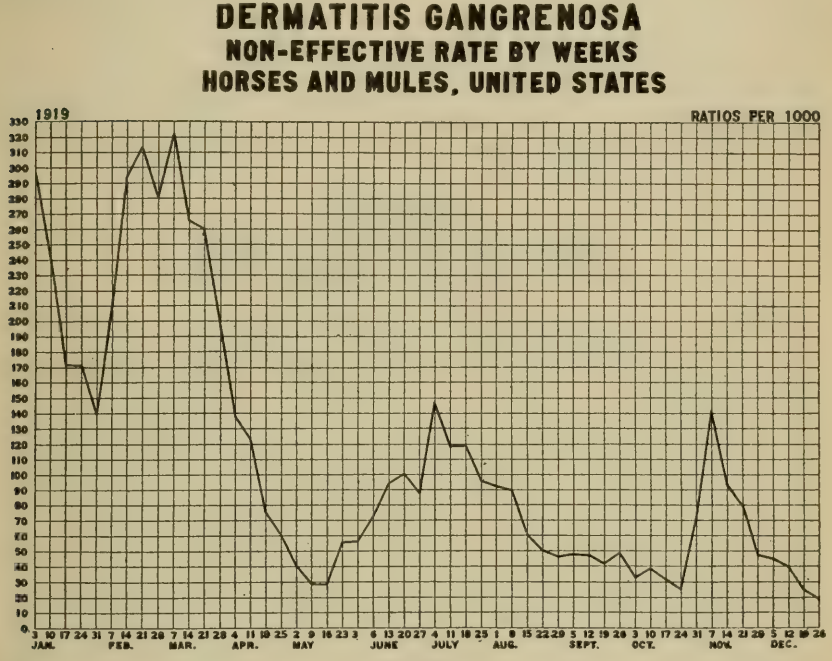


FIG. 48.

INFLUENZA.

The number of cases actually reported in the Army, exclusive of the American Forces in Germany, was 935, of which 874 were horses and 61 mules. The rate of admissions for influenza for 1919, irrespective of the proportion of horses and mules, was 8.02 per 1,000. Allowing for the difference in the number of horses and mules, the average rate of admission among the horses exceeded that of mules by 133.27 per cent. Of the 935 animals admitted with influenza 27 horses and 5 mules died or were destroyed and 1 horse and 2 mules were otherwise disposed of. Since the animals otherwise disposed of are lost to the service, they should be considered with the death rate in estimating the loss to the Army. On this basis influenza shows an annual death rate of 8.04 per 1,000.

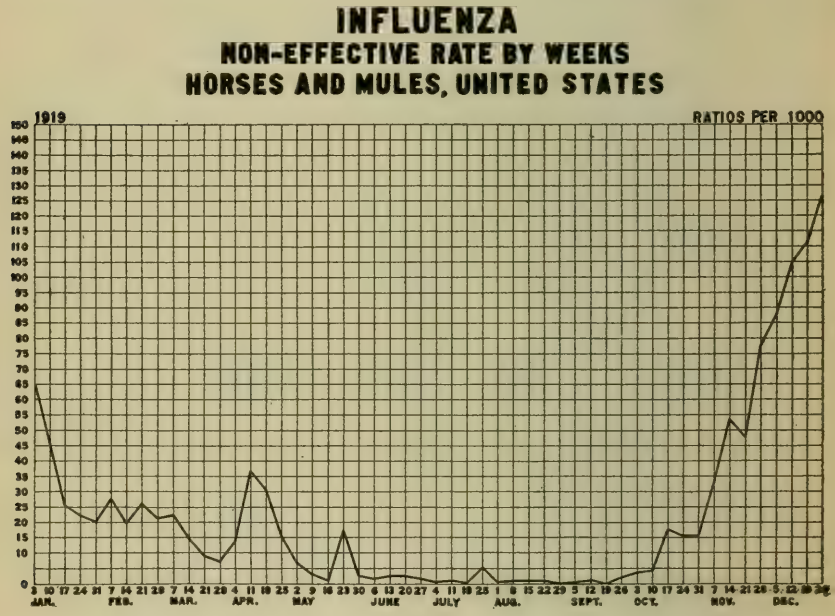


FIG. 49.

[Probably includes many cases of strangles, as the early symptoms of the two diseases are analogous.]

STRANGLES.

The number of cases reported in the Army, exclusive of the American Forces in Germany, were 565, of which 532 were horses and 33 were mules. The rate of admission for strangles for 1919, irrespective of the proportion of horses and mules was 4.84 per 1,000. Allowing for the difference in the numbers of horses and mules, the average rate of admission among the horses exceeded that of mules by 1,512.12 per cent.

Of the 565 animals admitted suffering strangles 14 horses and 2 mules died or were destroyed and 13 horses were otherwise disposed of, giving a total loss to the Army of 29 animals. The annual death rate from strangles then for 1919 is 0.25 per 1,000, an insignificant loss from a severe disease. The chief loss of any significance occasioned in 1919 from strangles is that due to noneffectives, which totaled 1,887, or 16.16 per cent of the average strength. Of the total noneffectives there were 76.27 per cent more horses than mules.

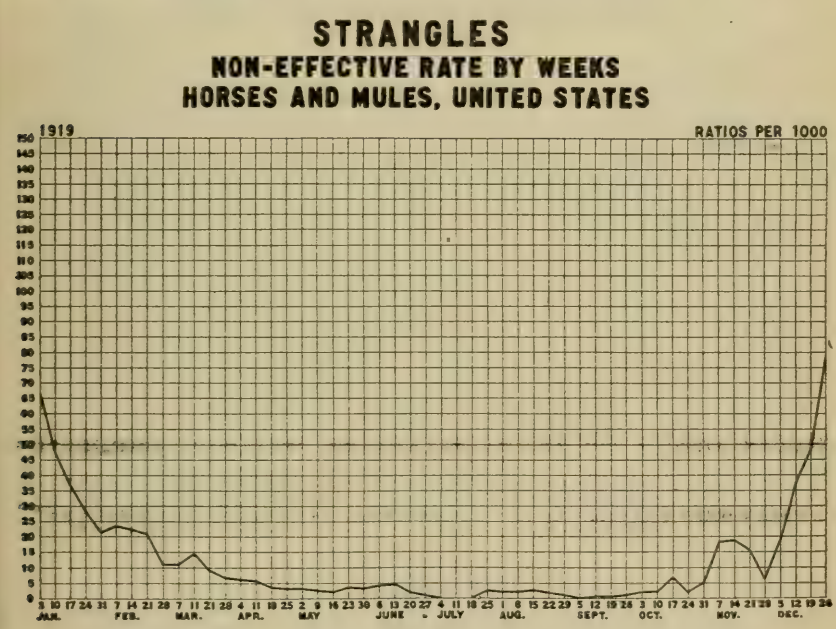


FIG. 50.

PNEUMONIA.

The number of cases of pneumonia of all kinds reported in the Army, exclusive of the American Forces in Germany, were 245, of which 193 were horses and 52 were mules. The rate of admission, irrespective of the number of horses and mules, was 2.10 per 1,000. Of the 245 animals admitted 81 horses and 38 mules died, an annual rate of 1.02 per 1,000. Of the total number of cases of pneumonia admitted 48.57 per cent died.

The low incidence of influenza and strangles and the most common complication of pneumonia is undoubtedly due to the fact that no new animals were purchased and shipped during the year, the sale of surplus animals and gradual lessening of the overcrowded conditions, and to the comparative immunity acquired by those animals which had recovered from "shipping fever" the previous year.

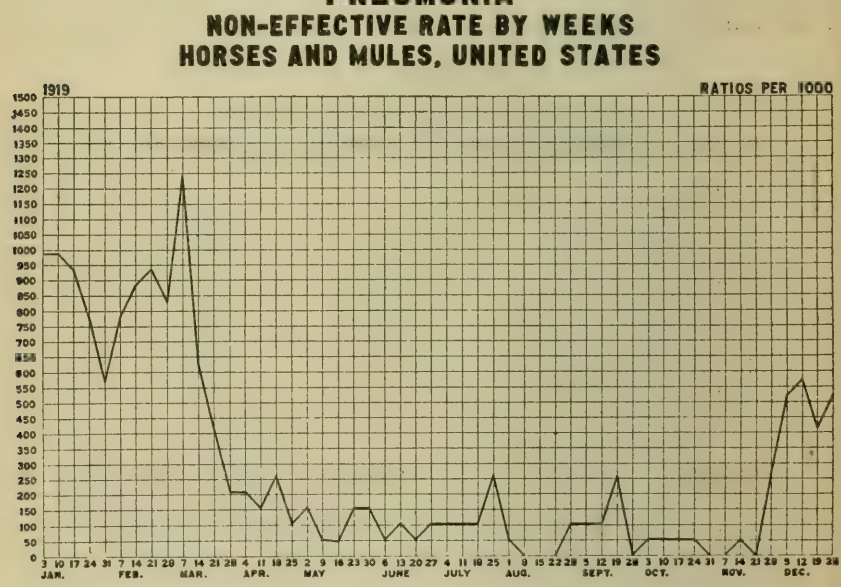


FIG. 51.

MANGE.

No cases have been reported amongst the Army animals in the United States. One case was discovered at the quarantine station at Newport News in an animal returned from France and after prolonged treatment was destroyed as incurable.

Mange in the American Forces in Germany.—To this one disease is attributable the great havoc wrought in animal efficiency of the armies in Western Europe. The records of the chief veterinarian, American Expeditionary Forces, show that on February 15, 1919, animal sickness in the United States Army reached its maximum for the whole period of operations, there being recorded as of this date 48,975 or about 21 per cent of the total number of animals there on hand. Of this number 30,756 were reported as suffering from mange.

The Third Army was remounted to full animal strength from ivisions not marching to Germany. These animals had all been

through the Meuse-Argonne offensive, and many of them had served in other sectors, so that all had been exposed to mange. Upon arrival in Germany, due to shortage in forage, overwork, and general insanitary surroundings, the disease rapidly extended. The gravity of the situation was apparent and at a meeting of the corps and army veterinarians it was decided to recommend the immediate construction of dipping vats and to use the lime and sulphur dip. A plan for the vats was submitted by the Army chief veterinarian, and construction began as soon as material became available. Most of the vats were built of concrete, but where cement was lacking wooden or steel vats were substituted. In all, 18 dipping vats were constructed. The first one started operation January 19, 1919, and the last one February 12, 1919. In connection with each station sulphuration chambers were provided for fumigating the blankets and sheds provided for the protection of animals after dipping. Each dipping station commander provided a schedule for dipping the animals of the nearest organizations. The animals were dipped, old blankets exchanged for new or clean ones, and the animals returned to their organizations the same day.

While dips were being built all affected animals were clipped as rapidly as possible and hand treatment given, applying the lime-sulphur solution by means of Vermorel sprays or sponges. This process continued until all animals had been clipped and dipped three times, after which only affected animals were isolated and treated further. Those affected with a hairless and wrinkled condition of the skin were further treated with sulphur ointment, using petrolatum or whale oil as a base.

It is interesting to note that animals were clipped and dipped continuously during the entire winter without loss from pneumonia or other conditions reasonably to be expected.

While the statistics show that mange at its height affected only 18.5 per cent of the animal strength of the First Army, as high as 50 per cent were infected in a number of divisions.

Number cases of mange on Nov. 30, 1918	1,000
Greatest number reported, Feb. 14, 1919	9,000
Number reported May 1, 1919 (none of those now carried are active cases, but still show evidence of having been affected)	1,989
Total cases (to May 1, 1920)	11,989
Number dipped Jan. 19, 1919, to May 1, 1919	145,920
Percentage of mange to all other contagious diseases	99
Number of tons of sulphur used to May 1	68
Number tons of lime used to May 1	97

INFECTIOUS ABORTION.

Cases of infectious abortion occurred in the spring of 1920 at the following remount depots: Fort Keogh, 37; Fort Reno, 27; and Front Royal, 11; and were treated with an infectious abortion bacterin.

In the dairy herd at Fort Leavenworth three cases occurred.

Mention is made in this report under the laboratory activities that at next foaling season experiments will be made to ascertain if there is any value in treating these cases with hyperimmune serum.

ULCERATIVE LYMPHANGITIS.

Two cases of ulcerative lymphangitis occurred among the animals imported from Europe and held in quarantine at Newport News. The animals were destroyed. Seven cases occurred in Hawaii and 19 in the Philippine Islands, none of which resulted fatally.

TRYPANOSOMIASIS.

After repeated tests trypanosomes were demonstrated in one animal imported from Europe and in quarantine at Newport News. The animal was destroyed.

ANTHRAX, DOURINE, EPIZOOTIC LYMPHANGITIS.

There were no cases reported of any of these diseases.

RINGWORM.

A considerable number of cases of ringworm were reported, but repeated microscopic examination failed to reveal the characteristic fungus, and the diagnosis is consequently in doubt.

Animal Morbidity and Mortality.

ANIMAL STRENGTH.

The animal strength was obtained from Form 102, Medical Department, rendered weekly from all stations to which a veterinary officer was assigned. Although the above contained the great majority of the animals, there were nevertheless numerous animals in other organizations not included in the reports. Based upon the reports received the average animal strength of the United States Army, exclusive of the American Forces in Germany, was 116,616 horses and mules, of which 68,659 were horses and 47,957 were mules, giving a horse strength of 58.87 per cent and a mule strength of 41.13 per cent, an approximate ratio of 3 horses for every 2 mules, or, more precisely, there were 43.16 per cent more horses than mules in the Army. The average animal strength taken for the period of the last nine months only is more representative, since the reduction from 273,391 on January 3, 1919, to 140,466 on April 4, 1919, is much greater than that in the succeeding nine months. The average animal strength figured on this basis is 88,654.

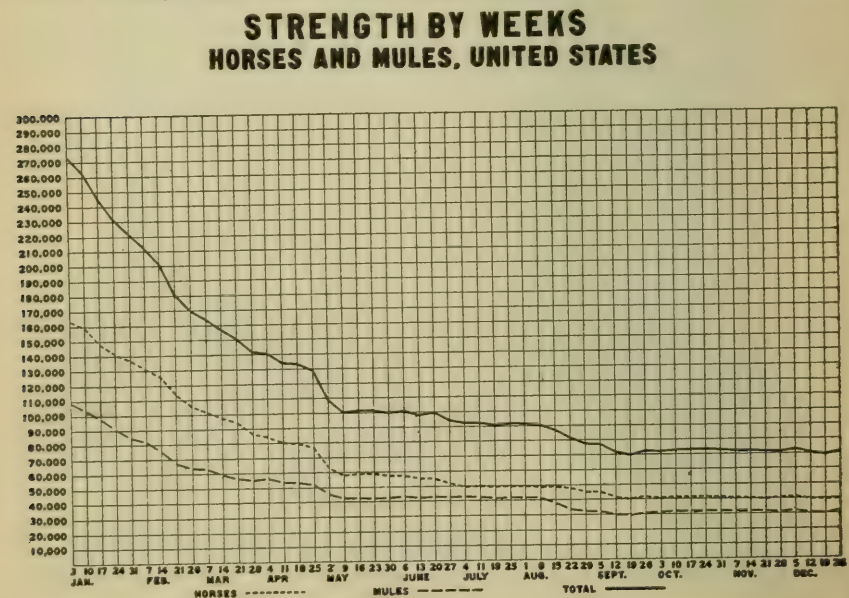


FIG. 52.

ADMISSIONS.

An animal is admitted to sick report when considered unserviceable for duty because of disease or injury. The admission rate is determined on the per thousand basis. The animal admission rate is obtained by determining the average weekly rate and multiplying it by the 52 weeks in the year.

The animal admission rate for the United States for all causes was 654.22 per thousand. The total admission for the same period, irrespective of the proportion of horses and mules, showed that 153.48 per cent more horses than mules were admitted to sick report. Considering the admission rate for horses in the horse group and the admission rate for mules in the mule group independently, there was an annual admission rate of 796.82 for every 1,000 horses and an annual admission rate of 450.05 for every 1,000 mules. Although the horse strength exceeded the mule strength by 43.16 per cent, the annual admission rate among the horses was 65.15 greater than among the mules, showing that the admission rate for horses was even greater than might be expected from the difference in number of animals in the two groups.

NONEFFECTIVES.

An animal remaining under treatment at the time a weekly report is submitted is considered a noneffective. As in the case of the animal strength, the report of the noneffectives is based on the report rendered on Form 102, Medical Department, which shows an average noneffective rate of 28.31 per 1,000. Based upon reports of the year of 1919, the total noneffectives carried along on sick report, irrespective of the proportion of horses and mules, showed 159.12 per cent more horses than mules.

Considering the noneffective horses in the horse group and the noneffective mules in the mule group separately, there was an average of 34.68 per cent noneffectives among every 1,000 horses and 19.22 per cent among every 1,000 mules. Allowing for the difference in the number of horses and mules, as in the case of the admission rate, the average rate of noneffectives among the horses exceeded that of mules by 65.62 per cent.

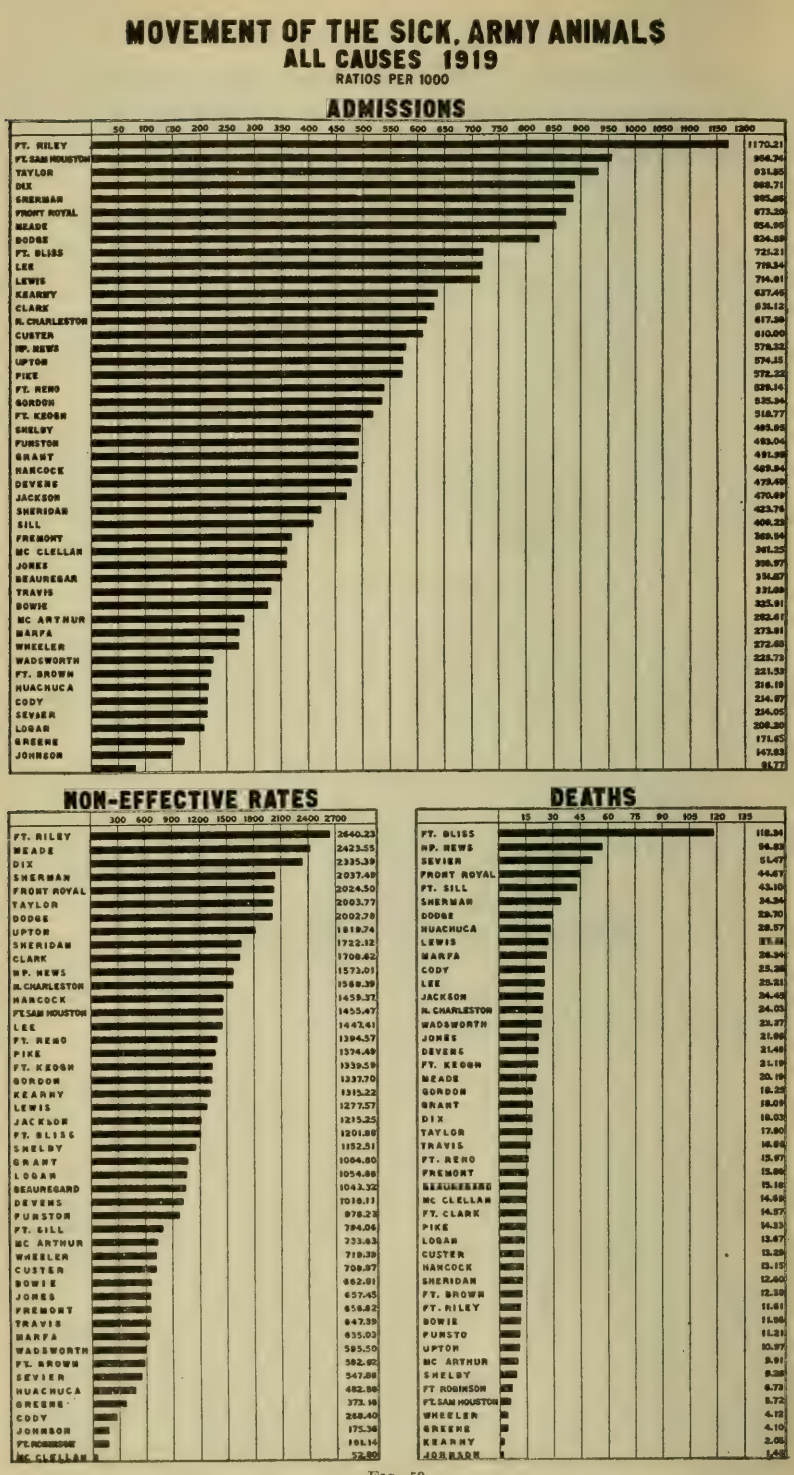

MOVEMENT OF THE SICK, ARMY ANIMALS
ALL CAUSES 1919
RATIOS PER 1000
ADMISSIONS
50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100 1150 1200
FT. RILEY 1170.21
FT. SAM HOUSTON 956.74
TAYLOR 931.85
DIX 868.71
SHERMAN 785.66
FRONT ROYAL 873.20
MEADE 854.90
DODGE 834.88
FT. BLISS 721.21
LEE 719.54
LEWIS 716.81
KEARNY 627.46
CLARK 625.12
N. CHARLESTON 617.38
CUSTER 610.00
NP. NEWS 578.32
UPTON 574.15
PIKE 572.22
FT. RENO 528.14
GORDON 525.94
FT. KEOGH 518.77
SHELBY 493.05
FUNSTON 483.04
GRANT 491.98
HANCOCK 489.94
DEVENS 479.48
JACKSON 470.69
SHERIDAN 423.76
SILL 408.22
FREMONT 369.54
MC CLELLAN 361.25
JONES 358.97
BEAUREGAR 334.87
TRAVIS 331.08
BOWIE 325.91
MC ARTHUR 282.61
MARFA 273.91
WHEELER 272.88
WADSWORTH 228.73
FT. BROWN 221.52
HUACHUCA 216.19
CODY 214.87
SEVIER 214.05
LOGAN 208.20
GREENE 171.65
JOHNSON 147.83
91.77
NON-EFFECTIVE RATES
300 600 900 1200 1500 1800 2100 2400 2700
FT. RILEY 2640.23
MEADE 2423.55
DIX 2335.39
SHERMAN 2037.48
FRONT ROYAL 2024.50
TAYLOR 2003.77
DODGE 2002.78
UPTON 1819.74
SHERIDAN 1722.12
CLARK 1708.62
NP. NEWS 1573.01
N. CHARLESTON 1568.39
HANCOCK 1459.37
FT. SAM HOUSTON 1455.47
LEE 1447.41
FT. RENO 1394.57
PIKE 1374.49
FT. KEOGH 1339.59
GORDON 1337.70
KEARNY 1315.22
LEWIS 1277.57
JACKSON 1215.25
FT. BLISS 1201.88
SHELBY 1152.51
GRANT 1084.80
LOGAN 1054.88
BEAUREGARD 1043.32
DEVENS 1018.11
FUNSTON 978.23
FT. SILL 784.06
MC ARTHUR 733.63
WHEELER 719.39
CUSTER 708.57
BOWIE 682.01
JONES 657.45
FREMONT 656.82
TRAVIS 647.39
MARFA 635.03
WADSWORTH 585.50
FT. BROWN 582.92
SEVIER 547.08
HUACHUCA 482.08
GREENE 373.18
CODY 268.40
JOHNSON 175.36
FT. ROBINSON 161.14
MC CLELLAN 72.80
DEATHS
15 30 45 60 75 90 105 120 135
FT. BLISS 118.34
NP. NEWS 94.83
SEVIER 51.47
FRONT ROYAL 44.67
FT. SILL 43.10
SHERMAN 34.24
DODGE 29.70
HUACHUCA 28.57
LEWIS 27.41
MARFA 26.94
CODY 25.28
LEE 25.21
JACKSON 24.45
N. CHARLESTON 24.03
WADSWORTH 23.57
JONES 21.96
DEVENS 21.48
FT. KEOGH 21.19
MEADE 20.19
GORDON 18.25
GRANT 18.09
DIX 18.03
TAYLOR 17.80
TRAVIS 16.86
FT. RENO 15.87
FREMONT 15.06
BEAUREGARD 15.18
MC CLELLAN 14.69
FT. CLARK 14.57
PIKE 14.33
LOGAN 13.67
CUSTER 13.29
HANCOCK 13.15
SHERIDAN 12.60
FT. BROWN 12.38
FT. RILEY 11.61
BOWIE 11.06
FUNSTO 11.21
UPTON 10.97
MC ARTHUR 9.91
SHELBY 9.28
FT ROBINSON 6.73
FT. SAM HOUSTON 5.72
WHEELER 4.72
GREENE 4.10
KEARNY 2.05
JOHNSON 1.48

FIG. 53.

DEATH RATE.

The death rate includes animals which died or were destroyed for various reasons. The total number of deaths reported was 4,819, giving an annual death rate of 41.32 per 1,000. The total number of deaths, irrespective of the proportion of horses and mules, showed 147.19 per cent more deaths among horses than the mules. Considering the death rate for horses in the horse group and the death rate for mules in the mule group separately, there was an annual death rate of 49.97 for every 1,000 horses, and an annual death rate of 28.94 per cent for every 1,000 mules. Again, allowing for the difference in the number of horses and mules, the annual death rate among the horses exceeded that of the mules by 63.22 per cent.

It is worthy of note that there is an average of 64 per cent higher rate among the horses for admissions, noneffectives, and deaths than among the mules.

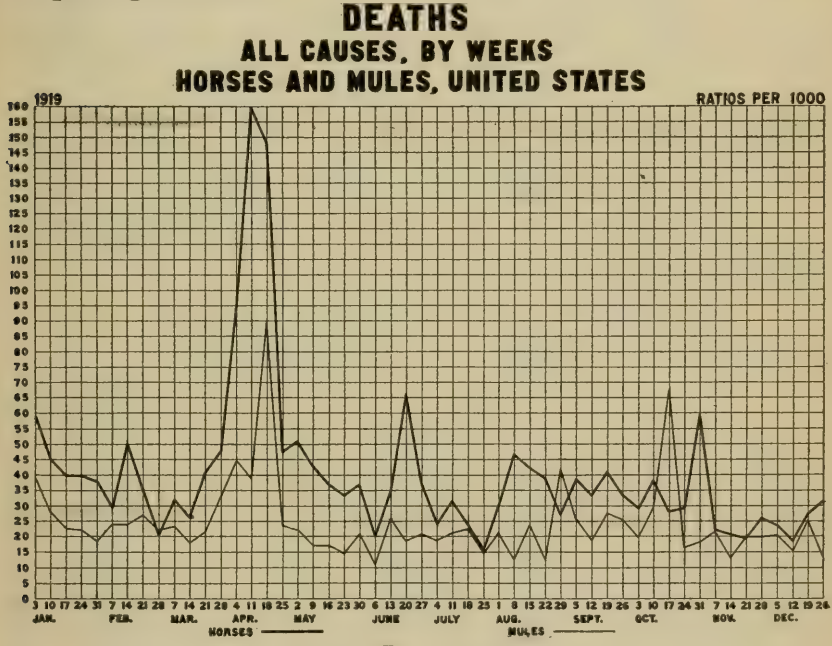


FIG. 51.

OTHERWISE DISPOSED OF.

Under this designation are those animals which have been inspected and condemned as unfit for further use in the service. Such animals were usually, but not always upon sick report, and, although susceptible in many cases to restoration to health, there were defects or economic reasons which made their sale desirable. Since these animals were lost to the service they should be considered with the death rate in estimating the total loss to the Army. During the period January–December, 1919, there were 1,171 disposed of, 860 of which were horses and 311 were mules. Based upon this period the total number of animals, irrespective of the proportion of horses and mules, should show that 176.53 per cent more horses than

mules were thus disposed of. The rate of disposal for horses in the horse group and the rate of disposal for mules in the mule group separately showed that the annual rate for horses was 12.53 per 1,000 and that for mules 6.48 per 1,000. With due allowance for difference in number of horses and mules, there was an annual rate of disposal for horses 93.21 per cent greater than that for mules.

RETURNED TO DUTY.

The animals returned to duty represent those on sick report which have sufficiently recovered from the disease or injury to be considered serviceable. The number of recovered or cured animals was obtained by deducting from those admitted to sick report the number of deaths and animals otherwise disposed of. On this basis for the January–December, 1919, period it was found that out of every 1,000 admissions 948.32 animals were returned to duty. In the horse group there were 948.94 recoveries for every 1,000 of admissions and in the mule group 946.60 for every 1,000, showing but slight difference in this respect in the two groups of animals.

CAUSES OF DEATH.

In considering the death rate, emphasis should be placed upon the fact that it includes all animals destroyed as well as those that died. Among the animals destroyed the cause reported oftentimes was not in itself fatal, but caused such a degree of disability that the cost of restoration to serviceable form was not commensurate with the value of the animal to the service.

Died and destroyed, United States, January to December, 1919.

[Percentage ratio of each group to the total number of deaths.]

	Number of cases.	Per cent of total.		Number of cases.	Per cent of total.
Glanders	1,138	23.61	Amaurosis	30	0.62
Miscellaneous [1]	402	8.36	Wounds, perforating	29	.60
Fractures	350	7.26	Canker	26	.54
Senility	264	5.47	Ringbone	25	.52
Dermatitis gangrenosa	197	4.09	Lightning stroke	22	.46
Colic	159	3.30	Debility	21	.44
Picked up nail	143	2.97	Abscess	20	.42
Under observation	138	2.86	Killed in action	20	.42
Wounds, lacerated	129	2.68	Malnutrition	20	.42
Pneumonia	119	2.47	Ophthalmia, periodic	20	.42
Wounds, contused	112	2.32	Peritonitis	20	.42
Wounds, penetrating	100	2.07	Rupture, intestinal	20	.42
Septicemia	98	2.03	Rupture, stomach	17	.35
Quittor	85	1.76	Strangles	16	.33
Hemoglobinuria	81	1.68	Paraplegia	15	.31
Laminitis	81	1.68	Tendinitis	15	.31
Intestinal impaction	69	1.43	Concussion of brain	14	.29
Burns, fire	68	1.41	Purpura hemorrhagica	14	.29
Exhaustion	68	1.41	Asphyxia	13	.27
Enteritis	60	1.25	Dermatitis, verrucosa	13	.27
Heat stroke	57	1.18	Forage poisoning	13	.27
Tetanus	52	1.08	Dislocation of patella	12	.25
Thrush	51	1.06	Drowning	12	.25
Indigestion	47	.98	Emphysema, pulmonary	12	.25
Pododermatitis	45	.93	Podotrochleitis	12	.25
Open joint	44	.91	Treads, calk	12	.25
Fistula, withers	41	.85	Sprain, joint	11	.23
Wounds, punctured	36	.75	Dermatitis, eczematosa	10	.21
Hemorrhage	35	.73			
Arthritis	33	.68	Total	4,819	100.00
Influenza	32	.66			

[1] The miscellaneous group contains the animals that died from various causes, the number of deaths for any one cause being less than 10.

Died and destroyed in the American Forces in Germany, January to December, 1919.

	Number of cases.	Per cent of total.		Number of cases.	Per cent of total.
Wounds and injuries	2,378	21.75	General debility	191	1.75
Skin	2,267	20.74	Nervous	133	1.22
Specific	1,926	17.62	Circulatory	100	.91
General	1,501	13.73	Visual	59	.54
Digestive	1,021	9.34	Urinary	30	.27
Respiratory	733	6.70	Generative	29	.26
Locomotory	321	2.94			
Lymphatic	244	2.23	Total	10,933	100.00

Incidence of Special Diseases.

DISEASES AND INJURIES OF GREATEST FREQUENCY.

Wounds of all varieties head the list of causes of admission, numbering 16,011 in horses and 6,571 in mules, a total of 22,582 admissions from this cause. With the exception of wounds, the 10 most common conditions are given below in the order of their relative incidence among all the Army animals. For convenience of comparison, the average noneffective rates and the absolute numbers died or destroyed and otherwise disposed of are also shown:

	Admissions.		Noneffective.		Died or destroyed.		Otherwise disposed of.	
	Absolute number.	Annual rate per 1,000.	Absolute number.	Average rate per 1,000.	Absolute number.	Annual rate per 1,000.	Absolute number.	Annual rate per 1,000.
1. Picked up nail:								
Horses	3,805	55.41	7,840	114.18	81	1.18	33	0.48
Mules	1,885	39.31	3,838	80.03	62	1.29	15	.31
Total	5,690	48.79	11,678	100.14	143	1.23	48	.41
2. Thrush:								
Horses	3,563	51.89	7,854	114.39	33	.48	64	.58
Mules	2,094	43.66	4,499	93.81	18	.37	33	.69
Total	5,657	48.51	12,353	105.93	51	.43	97	.83
3. Dermatitis gangrenosa:								
Horses	3,676	53.54	12,742	185.58	122	1.78	80	1.17
Mules	890	18.56	3,839	70.05	75	.07	28	.58
Total	4,566	39.15	16,581	142.18	197	1.69	108	.93
4. Pododermatitis:								
Horses	2,083	30.34	4,042	58.87	39	.57	29	.42
Mules	376	7.84	936	19.52	6	.12	7	.15
Total	2,459	21.06	4,978	42.69	45	.38	36	.31
5. Gall, harness:								
Horses	1,029	14.99	1,959	28.55	2	.03	25	.36
Mules	1,254	26.15	1,862	38.83	0	.....	0	.....
Total	2,283	19.58	3,821	32.77	2	.01	25	.21
6. Dermatitis eczematosa:								
Horses	1,771	25.79	3,789	55.16	7	.10	17	.25
Mules	295	6.15	789	16.42	3	.06	1	.02
Total	2,066	17.71	4,578	39.26	10	.08	18	.15

	Admissions.		Noneffective.		Died or destroyed.		Otherwise disposed of.	
	Absolute number.	Annual rate per 1,000.	Absolute number.	Annual rate per 1,000.	Absolute number.	Annual rate per 1,000.	Absolute number.	Annual rate per 1,000.
7. Dermatitis verrucosa:								
Horses	733	10.67	2,548	37.11	10	0.15	11	0.16
Mules	1,167	24.34	482	10.05	3	.06	0	.....
Total	1,900	17.20	3,030	25.89	13	.11	11	.09
8. Scratches:								
Horses	1,486	21.64	1,691	24.63	6	.09	17	.25
Mules	351	7.32	196	4.09	2	.04	6	.13
Total	1,837	15.75	1,887	15.32	8	.07	23	.20
9. Tendinitis:								
Horses	1,215	17.70	2,835	41.34	9	.13	18	.26
Mules	584	12.18	1,255	26.17	6	.12	10	.21
Total	1,799	15.43	4,090	35.03	15	.14	28	.24
10. Gall, saddle:								
Horses	1,305	12.01	2,788	40.61	0	.....	4	.06
Mules	221	4.61	426	8.88	0	.....	0	.....
Total	1,526	13.09	3,214	27.56	0	.....	4	.03

INCIDENCE AND LOSSES AT LARGER STATIONS.

Tabulations follow showing the prevalence at stations having an average strength in excess of 2,000 animals of 15 pathological conditions, selected because of their relative high incidence in the Army at large and because they are in many instances preventable, communicable, or of special professional or economic importance. These conditions, in the order of their incidence in the Army, are as follows:

1. Picked up nail.
2. Thrush.
3. Dermatitis gangrenosa.
4. Gall (all varieties).
5. Pododermatitis.
6. Scratches.
7. Tendinitis.
8. Colic.
9. Compsomina macellaria infection (screw worm).
10. Burn, rope.
11. Laminitis.
12. Influenza.
13. Strangles.
14. Pneumonia.
15. Tetanus.

The omission of any one of the foregoing from the tables indicates that no cases were reported. Statistics are from the consolidated returns of camps and remount depots.

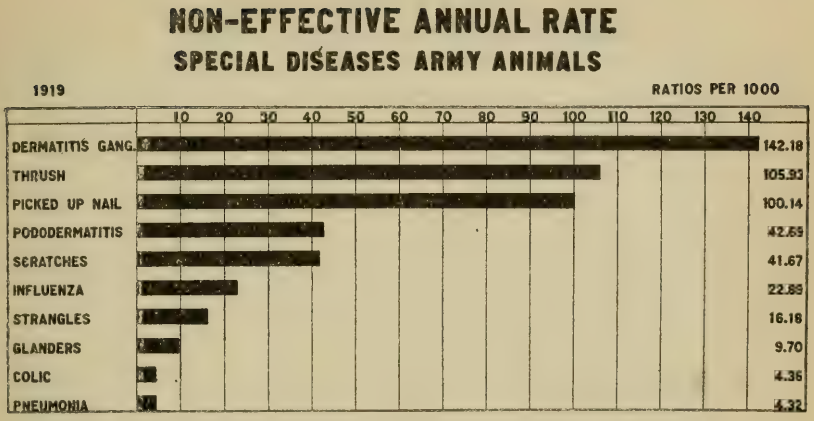

NON-EFFECTIVE ANNUAL RATE
SPECIAL DISEASES ARMY ANIMALS
1919
RATIOS PER 1000
10 20 30 40 50 60 70 80 90 100 110 120 130 140
DERMATITIS GANG. 142.18
THRUSH 105.93
PICKED UP NAIL 100.14
PODODERMATITIS 42.69
SCRATCHES 41.67
INFLUENZA 22.88
STRANGLES 16.18
GLANDERS 9.70
COLIC 4.36
PNEUMONIA 4.32

FIG. 55.

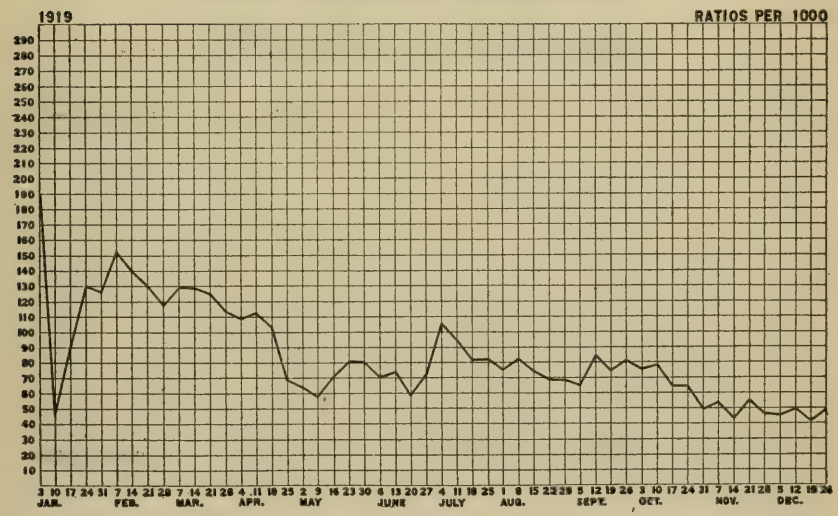

THRUSH
NON-EFFECTIVE RATE BY WEEKS
HORSES AND MULES, UNITED STATES
1919
RATIOS PER 1000
290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10
3 10 17 24 31 7 14 21 28 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27 4 11 18 25 1 8 15 22 29 5 12 19 26 3 10 17 24 31 7 14 21 28 5 12 19 26
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.

FIG. 56.

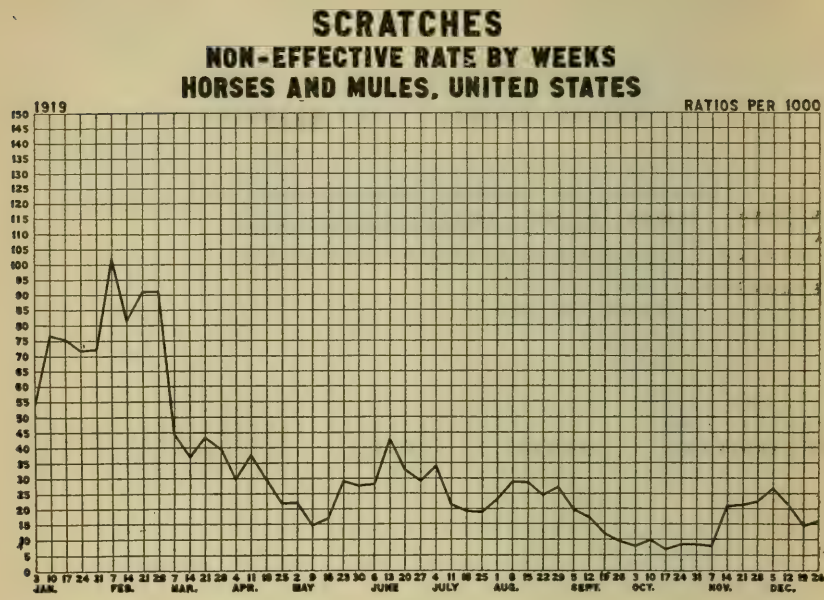

SCRATCHES
NON-EFFECTIVE RATE BY WEEKS
HORSES AND MULES, UNITED STATES
1919
RATIOS PER 1000
JAN.
FEB.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT.
OCT.
NOV.
DEC.

FIG. 57.

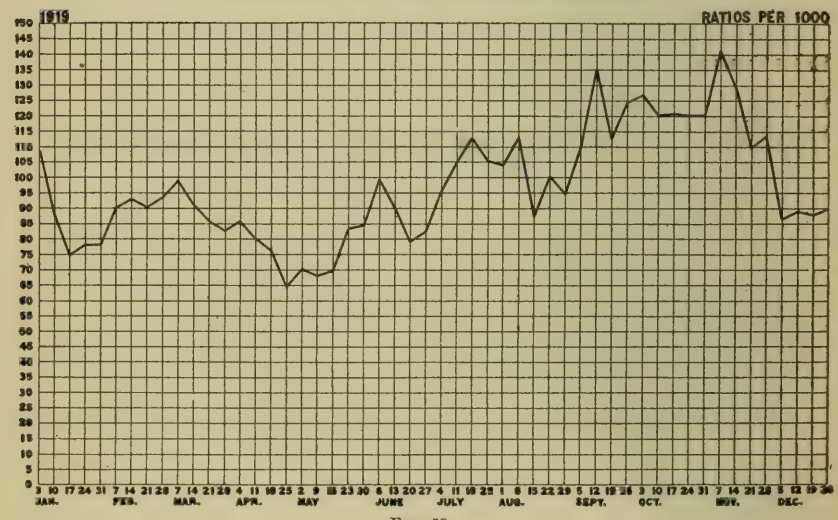

PICKED UP NAIL
NON-EFFECTIVE RATE BY WEEKS
HORSES AND MULES, UNITED STATES
1919
RATIOS PER 1000
JAN.
FEB.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT.
OCT.
NOV.
DEC.

FIG. 58.

TABLE 100.—*Special diseases, Army horses—Camps, by months, 1919.*

Camps.	Average strength.	Picked up nail.		Thrush.		Dermatitis gangrenosa.		Gall (all varieties).		Pododermatitis.		Scratches		Tendinitis.		Colic.		Composmina macellaria infection (screw worm).		Burn, rope.		Laminitis.		Influenza.		Strangles.		Pneumonia.		Tetanus.		Total.	
		Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.
Beauregard, La.	1,866	16	....	39	2	585	10	6	....	....	....	5	....	....	....	6	1	....	....	1	....	6	....	1	....	....	....	....	....	....	....	665	13
Bliss, Fort, Tex.	6,269	278	7	215	6	7	1	193	....	398	10	11	....	191	1	240	30	1	....	47	2	106	4	25	....	5	....	2	2	2	1	1,721	64
Bowie, Tex.	2,045	33	....	50	1	59	6	5	....	....	....	60	1	2	....	15	1	....	....	7	....	10	1	4	....	10	....	....	....	....	....	255	10
Cody, N. Mex.	2,481	23	1	3	....	....	....	....	....	....	....	2	....	3	....	5	4	....	....	3	....	16	....	9	....	5	4	....	....	....	....	69	9
Custer, Mich.	1,377	27	....	26	....	....	....	21	....	55	....	132	....	26	....	19	6	....	....	3	....	6	....	....	....	....	....	....	....	....	....	315	6
Dodge, Iowa.	1,027	29	2	63	....	91	5	29	....	....	....	39	....	24	1	3	....	....	....	11	....	29	1	2	....	1	....	2	1	....	....	323	10
Funston, Kans.	1,209	40	1	29	....	....	....	53	....	5	....	26	....	20	1	27	6	....	....	9	....	12	....	74	....	7	....	2	2	....	....	304	10
Gordon, Ga.	1,425	93	4	33	....	37	1	27	....	142	....	94	1	1	....	23	8	....	....	5	....	18	....	12	....	42	1	3	3	....	....	530	18
Grant, Ill.	1,017	24	....	70	1	74	....	18	....	1	....	84	....	8	....	14	4	....	....	17	....	30	....	14	2	4	....	17	1	1	....	376	8
Hancock, Ga.	1,629	9	1	60	1	426	11	34	....	....	....	11	....	8	....	12	2	....	....	2	....	7	1	84	7	24	2	8	3	....	....	685	28
Jackson, S. C.	3,000	134	10	233	4	54	5	64	....	6	....	46	....	8	....	67	15	....	....	11	....	22	2	3	....	33	2	6	5	2	2	689	45
Jones, Ariz.	2,165	12	....	42	....	....	....	4	....	....	....	3	....	29	....	15	2	6	....	16	....	7	....	....	....	1	....	....	1	1	....	136	3
Kearny, Calif.	1,496	13	....	145	1	....	....	8	....	....	....	9	....	35	....	42	3	....	....	9	....	40	1	....	....	2	....	3	1	1	....	307	6
Lee, Va.	1,376	51	2	145	1	40	....	67	....	13	....	139	....	13	....	33	4	....	....	6	....	27	1	89	13	59	1	16	3	2	....	700	25
Lewis, Wash.	1,733	148	2	35	....	21	....	16	....	1	....	26	....	28	....	25	5	....	....	17	....	6	....	9	1	11	1	3	....	....	....	346	9
MacArthur, Tex.	2,415	146	3	83	....	85	17	5	....	49	....	1	....	26	....	15	1	....	....	2	....	6	....	....	....	9	....	6	1	....	....	433	22
McClellan, Ala.	3,072	46	3	31	....	23	1	21	....	2	....	236	....	6	....	19	7	....	....	6	....	4	....	25	....	1	....	4	3	....	....	424	14
Marfa, Tex.	1,861	60	1	30	....	....	....	67	....	....	....	1	....	42	....	38	8	....	....	25	....	62	2	....	....	....	....	3	2	1	1	329	14
Meade, Md.	1,315	90	2	93	1	88	....	208	1	31	2	194	1	12	....	29	8	....	....	13	....	16	....	7	....	58	1	11	5	1	....	851	21
Pike, Ark.	999	71	1	89	....	9	....	9	....	1	....	17	....	15	....	17	2	....	....	17	....	19	1	47	....	....	....	1	....	....	....	312	4
Sevier, S. C.	2,221	15	....	142	....	....	....	7	....	....	....	91	....	1	1	7	1	....	....	1	....	13	....	....	....	14	4	1	....	....	....	292	6
Shelby, Miss.	2,606	4	....	164	....	240	2	48	....	2	....	1	....	8	....	35	2	....	....	9	....	9	....	119	1	1	....	1	....	....	....	641	5
Sheridan, Ala.	1,643	36	....	13	....	268	8	....	....	....	....	2	....	....	....	12	3	....	....	....	....	3	....	....	....	3	....	1	1	....	....	338	12
Sill, Fort, Okla.	3,354	100	4	145	1	22	2	28	....	125	7	25	....	17	....	39	3	....	....	20	....	39	1	....	....	....	....	....	....	....	....	560	18
Travis, Tex.	5,942	549	10	218	2	222	3	157	....	434	1	76	....	31	....	69	11	1,131	....	74	....	101	6	23	....	13	....	22	5	2	....	3,122	28
Upton, N. Y.	572	33	....	80	....	....	....	50	....	1	....	20	....	9	....	9	4	....	....	21	....	7	1	....	....	....	....	8	....	2	1	240	6
Wadsworth, S. C.	3,050	45	3	8	....	162	4	18	....	54	2	76	....	7	....	17	3	....	....	1	....	7	....	....	....	....	....	....	....	....	....	395	12
Wheeler, Ga.	2,749	15	1	160	2	164	1	6	....	9	....	5	....	4	....	97	6	....	....	....	....	8	....	....	....	....	....	2	1	....	....	470	11
Remount depots:																																	
Front Royal, Va.	685	33	....	10	....	....	....	8	....	7	....	5	....	5	....	19	6	....	....	3	....	4	1	41	....	14	....	....	....	3	2	152	9
Fort Keogh, Mont.	1,108	19	1	4	....	....	....	23	....	....	....	26	....	10	....	39	6	....	....	2	....	6	....	....	....	100	3	23	5	....	....	252	15
Fort Robinson, Nebr.	177	4	....	....	....	....	....	9	....	....	....	....	....	....	....	3	1	....	....	2	....	1	....	....	....	14	....	....	....	....	....	33	1
Fort Reno, Okla.	938	18	2	17	....	....	....	10	....	....	....	4	....	5	....	29	2	1	....	1	....	13	....	2	....	32	3	2	1	....	....	134	8
Total.	.....	2,214	61	2,475	23	2,677	77	1,219	1	1,336	22	1,467	3	594	4	1,039	165	1,139	....	361	2	660	23	581	24	453	14	165	53	19	8	16,399	480

TABLE 101.—*Special diseases, Army mules—Camps, by months, 1919.*

Camps.	Average strength.	Picked up nail.		Thrush.		Dermatitis gangrenosa.		Gall (all varieties).		Pododermatitis.		Scratches.		Tendinitis.		Colic.		Composmina macellaria infection (screw worm).		Burn, rope.		Laminitis.		Influenza.		Strangles.		Pneumonia.		Tetanus.		Total.	
		Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.	Cases.	Died or destroyed.
Beauregard, La	1,758	13	....	13	1	125	3	7	....	....	....	7	....	1	....	2	1	....	....	6	....	....	....	1	....	....	....	....	....	....	....	175	5
Bliss (Fort), Tex	1,285	43	2	42	2	1	....	17	....	1	....	6	....	25	1	12	3	....	....	8	....	2	1	2	1	....	....	1	1	....	....	160	11
Bowie, Tex	1,502	26	....	40	....	7	2	16	....	....	....	10	1	1	....	1	....	....	....	17	....	1	....	1	....	....	....	....	....	....	....	120	3
Cody, N. Mex	1,554	16	....	7	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	2	....	9	....	....	....	1	....	2	1	....	....	39	1
Custer, Mich	1,182	24	....	29	....	....	....	1	....	24	....	21	....	52	....	5	1	....	....	7	....	1	....	....	....	....	....	1	1	....	....	165	2
Dodge, Iowa	1,128	56	2	58	2	30	10	114	....	....	....	36	....	14	....	3	1	....	....	5	....	9	....	....	....	1	1	2	....	....	....	328	16
Funston, Kans	1,736	44	1	59	....	....	....	9	....	1	....	11	....	37	1	7	2	....	....	10	....	11	....	1	....	....	....	1	1	....	....	191	5
Gordon, Ga	2,466	150	7	41	....	11	....	10	....	67	....	23	....	2	....	7	6	....	....	8	....	2	....	....	....	....	....	3	3	1	1	325	17
Grant, Ill	1,406	52	....	45	....	11	1	14	....	1	....	11	....	5	....	1	....	....	....	19	....	14	....	....	....	....	....	1	1	....	....	174	2
Hancock, Ga	955	4	....	24	....	4	....	18	....	....	....	3	....	2	....	3	2	....	....	1	....	....	....	7	....	....	....	1	....	1	....	68	2
Jackson, S. C	1,827	51	2	106	1	175	12	62	....	1	....	6	....	8	....	21	5	....	....	7	....	4	....	....	....	....	....	5	1	1	....	447	21
Jones, Ariz	763	1	....	3	....	....	....	....	....	....	....	....	....	....	....	2	2	....	....	....	....	1	....	....	....	....	....	....	....	....	....	7	2
Kearny, Calif	934	13	....	72	....	....	....	6	....	....	....	1	....	12	....	7	3	....	....	3	....	20	1	....	....	1	....	....	....	....	....	135	4
Lee, Va	1,877	43	2	150	1	8	....	23	....	....	....	8	....	15	....	9	4	....	....	1	....	3	....	5	1	2	....	....	....	....	....	267	8
Lewis, Wash	879	40	1	26	....	3	....	3	....	....	....	9	1	7	....	....	....	....	....	2	....	5	....	2	1	....	....	....	....	....	....	97	3
MacArthur, Tex	1,219	23	4	22	....	14	3	16	....	5	....	....	....	7	....	1	1	....	....	2	....	1	....	....	....	2	....	....	....	....	....	93	8
McClellan, Ala	1,966	42	5	26	....	3	....	23	....	....	....	34	....	4	....	5	2	....	....	9	....	1	....	10	1	....	....	....	....	....	....	157	8
Marfa, Tex	1,068	15	....	8	....	....	....	60	....	....	....	....	....	6	....	4	1	....	....	1	....	6	2	....	....	....	....	1	1	1	....	102	4
Meade, Md	1,360	40	....	53	....	13	....	3	....	9	1	16	....	13	....	5	1	....	....	9	....	3	....	....	....	4	....	2	2	....	....	170	4
Pike, Ark	1,722	43	1	47	1	6	1	4	....	2	....	4	....	20	....	5	1	....	....	8	....	5	1	8	....	....	....	5	4	....	....	157	9
Sevier, S. C	1,937	13	....	82	....	....	....	....	....	....	....	20	....	1	....	3	2	....	....	2	1	....	....	....	....	....	....	....	....	....	....	121	3
Shelby, Miss	1,715	5	....	51	....	9	....	41	....	....	....	....	....	6	....	7	3	....	....	3	....	5	....	....	....	....	....	1	1	....	....	128	4
Sheridan, Ala	1,531	10	....	4	....	85	2	....	....	....	....	....	....	....	....	8	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	108	4
Sill (Fort), Okla	1,565	27	2	32	....	41	1	4	....	23	4	3	....	10	....	4	1	....	....	2	....	8	1	....	....	....	....	....	....	....	....	154	9
Travis, Tex	3,190	103	....	101	....	33	3	96	....	28	....	14	....	18	....	9	2	36	....	57	....	14	....	....	....	....	....	4	1	....	....	516	6
Upton, N. Y	1,525	33	....	123	....	....	....	46	....	1	....	17	....	6	....	2	2	....	....	19	....	1	1	....	....	....	....	2	1	....	....	250	4
Wadsworth, S. C	1,4?2	20	2	8	....	11	1	13	....	22	4	....	....	4	1	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	81	8
Wheeler, Ga	1,139	4	....	45	....	3	....	....	....	1	....	....	....	....	....	5	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	59	1
Remount Depots:																																	
Front Royal, Va	9	....	....	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	5	....
Fort Keogh, Mont	544	4	....	2	....	....	....	12	....	....	....	6	....	4	....	6	1	....	....	3	....	....	....	....	....	6	....	....	....	....	....	43	1
Fort Robinson, Nebr	1,902	18	....	1	....	....	....	3	....	....	....	....	....	2	....	5	3	....	....	2	....	....	....	....	....	....	....	....	....	....	....	31	3
Fort Reno, Okla	314	9	....	3	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	2	....	....	....	....	....	17	....
Total	....	985	31	1,328	8	593	39	622	....	186	9	267	2	284	3	150	53	36	....	215	1	129	7	37	4	20	1	33	19	5	1	4,890	178

TABLE 102.—*Absolute number of diseases, Army animals, for United States Army covering period of Jan. 1 to Dec. 31, 1919 (exclusive of American Expeditionary Forces, France).*

Diseases.	Admissions.		Deaths.		Noneffective.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Abortion	31				27			
Abortion infectious					6			
Abscess	822	317	17	3	2,214	819	16	2
Acne	4	7			8	17		
Alopecia	1	6			5	10		
Amaurosis	22	6	28	2	36	9	8	
Amblyopia	1				3			
Anemia	9	12	2	2	29	11		
Aneurism	1		1	1				
Ankylosis	11	4	6	1	20	12	1	1
Anorexia	4				4			
Apoplexy		2		3				
Arthritis	19	157	22	11	604	434	8	11
Ascites		1		1		1		
Asphyxia	1	1	9	4				
Atrophy	13	15			48	46		1
Autointoxication	10	3	3	1	10	3		
Ascariasis	20	5			20	5		
Balanitis	2				5			
Bite	13	9			21	35		
Bite venomous	3				6			
Blepharitis	4				1	1		
Botryomycosis	1				2			
Bronchitis	23	4	1		39	7		
Burns, chain	2	1			4	1		
Burns, chemical	4	12			10	15		
Burns, fire	30	49	29	39	98	176	1	
Burns, rope	907	476	4	2	1,841	1,111	1	2
Burns, wire		2			1	7		
Bursatte	3	5			30	5		
Bursitis	184	52	5		623	167	4	3
Calculus, salivary	4	2			13	5		
Canker	194	91	25	1	731	368	3	
Carcinoma	1	2	1		3	3		
Cardiac collapse	1		1					
Cardiac dilatation		1	1	2				
Cardiac disorder	1			1	2			
Cardiac dis. functional	1		2					
Cardiac hypertrophy			1					
Cardiac hypertrophy and dilatation	1		1					
Cardiac palpitation	33	1	1		7	4		
Cataract	10	4	4		49	3	3	
Catarrh, nasal	1				5			
Choke, oesophogeal	2	3	1	2	8	2		
Chorea	4	3			7	4		
Choroditis	1	2	1			1		
Cicatrices	14	1			33	3	1	
Circulatory system		3		2		2		
Colic	1,234	262	101	58	423	86	2	
Concussion of brain	1	1	9	5				
Conjunctivitis, simple	13	4			19	2		
Conjunctivitis, catarral	446	143	3		752	267	4	2
Conjunctivitis, granular	1	2			11	3		
Conjunctivitis, purulent	26	9			61	9	1	
Conjunctivitis, traumatic	16	10			31	17		
Contracture, hoof	19	12	2		59	32	1	1
Contracture, muscle	4	1			5			
Contracture, tendon		1		1				
Coryza, simple	235	43	4		523	64	2	
Cryptorchidism	31		3		119	1		
Curb	17	12	1	1	63	43		
Cyst	77	16		1	219	33		
Cystitis	13	2	2		15	7	1	
Compsomina, macillaria larvæ	1,332	56			1,092	90		
Debility	15	1	21		27			
Decubitus		1		1		1		
Dental disease	245	64	3	1	322	80	2	1
Dermatitis	98	98	3	1	758	282	2	
Dermatitis cont. pustulosa	22	15	1		71	23		
Dermatitis eczematosa	1,771	295	7	3	3,789	789	17	1
Dermatitis gangrenosa	3,676	890	122	75	12,742	3,839	80	28
Dermatitis medicamentosa		2				11		
Dermatitis parasitic		3			10	8		

TABLE 102.—*Absolute number of diseases, Army animals, for United States Army covering period of Jan. 1 to Dec. 31, 1919 (exclusive of American Expeditionary Forces, France)*—Continued.

Diseases.	Admissions.		Deaths.		Noneffective.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Dermatitis suppurative	12	1	1		27	1		
Dermatitis traumatic	25	10	2	1	92	15		
Dermatitis verrucosa	733	1,167	10	3	2,548	482	11	
Dhobie itch	27	7			151	47		
Diabetes					6			
Diaphram, spasm of	6	2	2		2			
Diarrhea	57	4	2	1	70	6		
Dislocation of patella	28	47	5	7	55	66	2	
Dislocation of shoulder	1	2			3	3	1	
Dislocation of vertebræ		1	1		2			
Drowning			3	9				
Edema	103	52	3	3	201	102	3	
Edema, sheath	1							
Electrical shock				1				
Elephantiasis	3	3			23	7	1	
Emaciation	21	5	2	1	52	10		
Embolism	1		2					
Emphysema, pulmonary	51	6	11	1	156	14	17	
Empyema, frontal sinus	9		3		73	11	1	
Encephalitis	1		1					
Endocarditis, chronic		1		1				
Enteritis	68	20	40	20	48	13		1
Epilepsy	5		2		2			
Epistaxis	12	3	1	3	11	4		
Epithelioma	5	6		1	23	33		
Esophagus, spasm of	2	1	2	1				
Exhaustion	71	29	47	21	90	15		
Exostosis	27	17	1	2	110	47	5	2
Exposure (extreme cold)	1		2					
Fever, simple	19		1		12			
Fibroma, benign	96	49	2		329	213		1
Fibroma, malignant					3			
Fistula	31	11	4	2	126	53	2	
Fistula, poll	20	7	4	1	147	29	2	
Fistula, withers	160	53	35	6	1,076	331	23	4
Forage poisoning	85	5	11	2	99	8		
Foreign body	1	1			1			
Foreign body, cornea	4		1		9			
Foreign body, esophagus	1							
Foreign body, foot	23	8			42	13		
Foreign body, shoulder					2			
Foreign body, trachea	1	1			1			
Foreign body, withers						1		
Fracture	193	66	257	93	336	103	5	1
Gall, harness	1,029	1,254	2		1,959	1,862	25	
Gall, saddle	1,305	221			2,788	426	4	
Gangrene	1				6			
Gastritis	20	6	3	1	4	1		
Gastro-enteritis			3					
Gengivitis	3	1			4	1		
Glanders	894	237	894	237				
Glossitis	5	1			16	2		
Goiter	1							
Gonitis	93	82	2	6	222	221	4	1
Granuloma	2				5	4		1
Heat stroke	56	25	28	29	26	11		
Hematoma	155	53		1	430	173	1	1
Hematuria	1	2			1	3		
Hemiplegia	3				5			
Hemoglobinuria	246	10	76	5	219	6	4	
Hemorrhage	8	5	18	17	3	2		
Hemorrhage, bladder		2				2		
Hemorrhage, cerebral			1					
Hemorrhage, internal	3	1	7	2				
Hemorrhage, pulmonary		5		3		2		
Hemorrhoids		2				3		
Hepatitis	2	1			4	1		
Hernia	8	7	1	5	46	34		1
Herpes tonsurans	5				16			
Hydrocele	3	9			19	14		
Hydrophobia	1		1					
Hydrothorax	1		1					
Hygroma	1				2			
Hygroma of elbow	67	19	1		229	55		
Hygroma of hock	15	11			38	20	2	

TABLE 102.—*Absolute number of diseases, Army animals, for United States Army covering period of Jan. 1 to Dec. 31, 1919 (exclusive of American Expeditionary Forces, France)*—Continued.

Diseases.	Admissions.		Deaths.		Noneffective.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Hygroma of knee	1				1			
Incoordination	3		3		6			
Indigestion, acute	118	44	29	18	64	23		
Influenza	874	61	27	5	2,189	480	1	2
Interference	11	2			18	2		
Intestinal catarrh	19	4	1	1	21	2		
Intestinal impaction	208	67	44	25	180	23		
Intestinal impaction with volvulus	5		7	1				
Iridocyclitis						2		
Iritis	9	3			12	5		
Intestinal torsion	2	2	2	1				
Jaundice		2		1		1		
Keratitis, nonulcerative	9	2			16	2		
Keratitis, parenchymatous	11	1			23	17		
Keratitis, superficialis	54	15			121	32	2	
Keratitis, ulcerative	13	9			18	20	1	
Killed in action			19	1				
Lameness (undiagnosed)	131	128		2	306	220	13	9
Laminitis	1,043	185	67	14	2,226	444	31	5
Laryngeal paralysis	46	2	4	3	97	3	6	
Laryngitis	70	16	2		119	26	2	
Lightning stroke	4		11	8				
Luxation of patella	1	5		1	4	29		
Lymphangitis	110	68	6	1	358	183	3	2
Lypoma					1	4		
Malnutrition	180	50	17	3	428	88	1	1
Mange, suspected	18	5			64	37		2
Mastitis	17				32			
Melanoma	1	1			1	19		
Meningitis-spinalis	8	2	4	1	20	4		
Meningo-encephalitis	3	3	3	3	3			
Metritis	1				2			
Myocarditis	2		2					
Myelitis	6	3	1		6	8		
Myositis	57	44			130	86	3	1
Necrosis	211	9	7		448	43		
Necrosis, frog	54	6		1	195	32		
Necrosis, maxillary			1					
Necrosis, tail	1				1			
Necrosis, tendon	1				3			
Nephritis	13	7	3	1	12	9		
Neurasthenia					2			
Neuritis		1			7	2		
Opacity of vitreous	3	1			5			
Open joint	29	20	24	20	58	35	1	2
Ophthalmia, periodic	315	117	20		705	303	22	7
Osteoma	3	3			23	5	1	
Osteoporosis		3		1		4		
Ostitis	3				3			
Oxyuriasis, oxyuris curvula	9				9			
Papilloma	11	9			42	31	1	1
Paralysis	2	3	2	1	6	9		
Paralysis, bladder		1				1		
Paralysis, brachial nerve	1	3			7	11		
Paralysis, crural				1				
Paralysis, eye			1					
Paralysis, facial	2		1					
Paralysis, inferior labial					7			
Paralysis, ligament	1				2			
Paralysis, lumbar	3				10			
Paralysis, muscle	11	7	3	3	42	29		
Paralysis, optic nerve	1				6			
Paralysis, pharyngeal	1	1	2	1	1			
Paralysis, popliteal nerve	1							
Paralysis, radial nerve	5	2		3	19	5		
Paralysis, rectum	1				7			
Paralysis, subscapular nerve		1	1		5			
Paralysis, tongue						7		1
Paraphimosis	9	7		1	16	20		
Paraplegia	20	5	13	2	56	10		
Paresis		1		1				
Parotitis	13		1		26	6		
Phthiriasis	64	33			130	62		
Penitis						1		
Pericarditis		1	1	1				
Periostitis	20	3	2	1	52	11	2	

TABLE 102.—*Absolute number of diseases, Army animals, for United States Army covering period of Jan. 1 to Dec. 31, 1919 (exclusive of American Expeditionary Forces, France)*—Continued.

Diseases.	Admissions.		Deaths.		Noneffective.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Peritonitis	14	4	13	7	13			
Pharyngitis	26	4	2	1	35	12		
Phimosis	7	4	1		11	6		
Phlegmona diffuse	4	1			12	2		
Picked up nail	3,805	1,885	81	62	7,840	3,838	33	14
Pleurisy	14	2	5	3	11		1	
Pneumonia	194	53	81	39	390	117	2	
Pododermatitis	2,083	373	39	6	4,042	936	29	7
Pododermatitis, circumscripta	418	23	2		707	58	2	
Poisoning, creolin	1		1					
Polypus, nasal	5	5			10	8		
Pedotrochlitis	61	19	8	4	128	27	16	6
Polyuria	1							
Proctitis	1				6			
Prolapsus ani	4	1	1		6	1		
Pruritis	12	4			47	45		
Pulmonary congestion	7	3	1	2	3	1		
Purpura hemorrhagica	11	10	10	4	20	23		
Pyaemia	2	3	2	1	1	7		
Pyelitis	1		1					
Quittor	460	112	67	18	2,386	558	50	9
Retention of urine	3				1			
Rheumatism, articular		2		1		10		
Ringbone	165	105	20	5	563	267	23	11
Rupture, intestinal	7	1	17	5	16	5		
Rupture, aneurism				1				
Rupture, aorta	2		4	1				
Rupture, bladder		1	4	2				
Rupture, bursa	1				4			
Rupture, diaphragm		1	1	5				
Rupture, eye	4	6			22	21		
Rupture, kidney			1					
Rupture, ligament	4	3	1		10	23		1
Rupture, muscle	1	1			15	2		
Rupture, rectum	1		1					
Rupture, spleen		1		1				
Rupture, stomach	7	6	10	7				
Rupture, tendon	10	7	3	1	43	12		
Rupture of ulnar nerve		1						
Scratches	1,486	351	6	2	4,002	857	17	6
Sarcoma		2				7		
Sclerostomiasis	12	1			11	1		
Seedy toe	53	32			179	167	2	
Senility	57	58	168	96	99	50	3	1
Septicemia	200	34	74	24	117	59		
Sesamoiditis	3	8		1	5	14		
Shock, surgical	1				1			
Shock, electrical	3	1	3	1				
Sidebone	196	147	4	3	572	440	20	10
Spavin, bog	31	12	1	2	96	28	1	
Spavin, bone	114	126	4	2	362	332	23	21
Splint	66	8			142	18	2	
Sprain, joint	908	586	7	4	1,811	1,365	10	4
Stenosis	2		1		2			
Stomatitis	40	10			85	16		
Strain, ligament	5	7			12	8		
Strain, muscle	89	72	2	2	153	156	4	7
Strangles	532	33	14	2	1,691	196	13	
Strangulation	2	1	2	1				
Stringhalt	8	3	1		11		1	1
Synovitis	38	18	7	2	107	28	1	
Scirrhous cord	8	4			28	10		
Tendinitis	1,215	584	9	6	2,838	1,255	18	10
Tendovaginitis	40	16			105	41		1
Tetanus	53	35	30	22	89	84		
Thoropin	16	8			27	24		
Thrombosis	1		1		4			
Thrombosis, cerebral	1				2			
Thrombosis, cardiac	1		2					
Thrush	3,563	2,094	33	18	7,854	4,499	64	33
Torticollis	1	1		1	1			
Treads, calk	416	69	9	3	892	188	10	
Tumor (unclassified)	7	13	2		40	23	1	1
Tumor, benign	22	18		1	62	76		1
Tumor, malignant	1		1		2			

TABLE 102.—*Absolute number of diseases, Army animals, for United States Army covering period of Jan. 1 to Dec. 31, 1919 (exclusive of American Expeditionary Forces, France)*—Continued.

Diseases.	Admissions.		Deaths.		Noneffective.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Tympanosomiasis (surra)	4		4		1			
Ulcer	7				27	1		
Ulcer, tropical	7	3			26	20		
Uremia		2			1			
Urethra, stricture of	1				1			
Urticaria	1				1			
Under observation	497	245	95	43	835	464	5	1
Valvular, heart disease	2		2	1	2			
Verruca	37	39	2		95	122	1	
Wounds, abraded	244	105	2	2	592	243	1	
Wounds, contused	5,983	2,183	75	37	12,444	5,007	27	19
Wounds, extensive	2	1			4	7		
Wounds, incised	737	271	6	1	1,970	692	8	6
Wounds, lacerated	4,945	2,305	80	49	12,742	5,802	61	26
Wounds, gunshot			5	1				
Wounds, infection of	18	11	2	1	48	24		
Wounds, penetrating	3,090	1,096	72	28	7,003	2,519	31	9
Wounds, perforating	368	143	22	7	799	266		
Wounds, punctured	642	467	25	11	1,441	802	16	3
Wounds, surgical	23	2			36	9		
Wounds, not classified	17	11	3		31	31		
Total	54,709	21,583	3,431	1,388	123,871	47,804	860	311

AMERICAN EXPEDITIONARY FORCES, FRANCE, JANUARY TO AUGUST, 1919.

Diseases.	Admissions.	Deaths.	Noneffective.	Otherwise disposed of.
Circulatory	91	100	172	114
Digestive	4,820	1,021	2,022	60
General	7,545	1,501	24,475	502
General debility	306	191	2,163	147
Generative	125	29	695	12
Locomotory	4,552	321	14,750	798
Lymphatic	761	244	1,907	287
Nervous	185	133	204	8
Respiratory	1,576	733	3,870	76
Skin	62,851	2,267	408,928	10,928
Specific	3,802	1,926	15,170	465
Urinary	118	30	185	5
Visual	626	59	1,856	95
Wounds and injuries	29,903	2,378	98,463	4,226
Total	117,261	10,933	504,860	17,723

FINANCE AND SUPPLY DIVISION.

The functions of the Medical Department as regards its supplies have continued during the year to be purely advisory. It has not had control of any depot or of the procurement, storage, and issue of supplies for the medical service of the Army, other than a few items such as artificial limbs and appliances, prosthetic appliances, arsenicals, biologicals, and books, journals, and reprints. The unhappy results of the consolidation of the supply services referred to in the last report have continued. Some few improvements have been made, it is true, but they have been made in spite of the system and by modification or waiver of many of the requirements. Some of the difficulties experienced have doubtless been due to the application of the general plan and the elucidation of details of

operation by personnel not oriented by practical experience in problems of supply. Satisfactory results in furnishing supplies for the medical service of the Army can only be secured when the responsibility is accompanied by full authority to do.

The sum of $4,500,000 appropriated for the Medical and Hospital Department in the Army appropriations act of July 11, 1919, proving inadequate to meet the exceptional conditions due to the large number of sick and wounded remaining in military hospitals and to the excessive demands for highly trained and technical civilian employees required to care for them after the demobilization of the emergency forces, an additional sum of $1,500,000 was granted by Congress in the second deficiency act of March 6, 1920. The funds available from these two acts were further supplemented by those in "Replacing medical supplies, 1919–20," funds. A statement of the several appropriations available to the Medical Department, as reported by the Chief of Finance, showing balances at the beginning of the year, amounts appropriated, adjustments, total obligations, and balances unobligated at the end of the year appears below. Of the various items of expenditure paid from the appropriation "Medical and Hospital Department, 1920," that for civilian employees is first, with $2,881,353.64, and then in order come laundry, $939,144.26; medical and hospital supplies either not in the standard supply table or purchased in emergencies, $412,063.48; biological supplies, $103,093.97; civilian medical attendance, $88,376 (includes medical, surgical, nursing, ambulance, hospital, dental, and veterinary services); orthopedic and prosthetic appliances, $78,812.30; books, journals, and reprints, $37,944.95; printing and binding, $6,931.70; miscellaneous items not classified or included in the above, $1,313,455.41; leaving a balance of $138,814.29. All these figures are approximate only and subject to revision by settlement of accounts which may yet be received.

A large part of the work in the administrative examination of accounts was devoted to the settlement of claims originating in the fiscal years 1918 and 1919. They were, for the most part, accounts for medical, hospital, dental, and veterinary treatment furnished by civilian physicians, nurses, institutions, dentists, and veterinarians for the care of military personnel and animals at stations where military agencies were not available. Of such accounts those from institutions at which units of the Students' Army Training Corps had been stationed during the fall of 1918 were found the most difficult of adjustment, due to the inexperience of personnel in charge of the institutions, the failure to keep necessary records and the seeming inability to comply with written instructions from this office concerning the details necessary to be included in the vouchers to permit of their payment. This difficulty was finally overcome by sending out traveling auditors to visit such units as could not or would not prepare their accounts in forms acceptable to the Treasury Department. Seven such auditors in all were engaged in this work for varying periods up to several months. The results of their work were entirely satisfactory. They were able to secure the necessary data to permit the settlement of all claims, the most of them by disbursing officers and a few by the Auditor for the War Department. In all there were 436 claims, involving $87,377.53, on account of services rendered the members of the Students' Army Training Corps

units remaining from the previous year. Of the total number of claims for all kinds of services and supplies given administrative examination by the department, 13,006 were approved for payment by disbursing officers and 430, accompanied by such recommendations as were deemed appropriate, were transmitted through the Director of Finance to the Auditor for the War Department for settlement. About 50 per cent of the vouchers received during the year were returned for correction or for additional information. Many of them involved considerable correspondence with the claimants, the certifying officer, and The Adjutant General. Quite a number of claims for treatment in civil hospitals or by civilian physicians for men absent on furlough were received. The claimant in such cases was notified that under provisions of law claims of this character are not payable from public funds.

Only such accounts for pay of civilian employees, Medical Department at large, as are incident to final payments on separation from the service are handled by the department, payments being made by the Finance Service. Ordinary monthly payments to these employees are made by local finance officers on authorizations and allotments from this office. At the beginning of the year there were 4,143 civilian employees, Medical Department at large, on the rolls. There were 2,319 separations from the service, leaving 1,824 on the rolls June 30, 1920. The services of these civilian employees were rendered for the most part at general, post, and station hospitals, aviation fields, and department surgeons' offices in the United States, Philippine Islands, Hawaiian Islands, and the Canal Zone, and at schools, laboratories, and attending surgeons' offices in the United States. The closing of 23 general and 8 other large hospitals during the year, and the continuous reduction in the number of patients remaining in the remaining hospitals, permitted reduction in the number of civilian employees. Enlisted personnel sufficiently educated and trained to fill the positions occupied by these civilian employees have not been available during the year.

On September 2, 1919, so much of the Requirements Division and the Procurements Authorization Division, Quartermaster General's Office, as was engaged on Medical Department matters was transferred to this office and ceased to function as a part of the office of the Director of Purchase and Storage. The requirements of the Medical Department on all medical supply items have been compiled and this compilation used as a basis for the declaration of surplus stocks and depot replenishments by the Director of Purchase and Storage. Supervision on behalf of the Quartermaster General has been had on requisitions for nonstandard medical supply items and on requisitions for replenishments of depot stocks. While no actual purchases have been made, procurement instructions covering the purchase of all medical supplies required during the year have been prepared in this office. Owing to the prolonged delays in handling requisitions, it was found necessary to allot funds to the various large hospitals for the procurement of medical and hospital supplies to meet emergencies and to carry on the pre-vocational training of the sick and wounded. Biologicals, such as smallpox vaccine and the various therapeutic sera, have been supplied freely to all medical units. By close liaison with the Purchase and Storage Service and the Director of Finance, it was possible to overcome many of the

delays and annoyances incident to existing methods of supply and to prevent suffering of the sick or serious inconvenience in the hospitals from lack of supplies.

MEDICAL AND HOSPITAL DEPARTMENT, 1920.

Appropriated for the fiscal year 1920	$6,000,000.00
Refundments during the year	53,979.55
Total to be accounted for	6,053,979.55
Disbursed during the year	3,576,603.46
Outstanding bills	2,338,561.80
Unobligated balance	138,814.29
Total accounted for	6,053,979.55

MEDICAL AND HOSPITAL DEPARTMENT, 1919.

Balance on hand, July 1, 1919	$93,062,319.68
Refundments during the year	3,531,855.17
Total to be accounted for	96,594,174.85
Disbursed during the year	21,032,793.56
Outstanding bills	73,641,437.23
Unobligated balance	1,919,944.06
Total accounted for	96,594,174.85

MEDICAL AND HOSPITAL DEPARTMENT, 1918.

Balance on hand, July 1, 1919	$3,777,679.76
Refundments during the year	3,714,957.89
Total to be accounted for	7,492,637.65
Disbursed during the year	714,058.21
Outstanding bills	6,205,028.82
Unobligated balance	573,550.62
Total accounted for	7,492,637.65

MEDICAL AND HOSPITAL DEPARTMENT, 1917–18.

Balance on hand, July 1, 1919	$1,371,468.57
Refundments during the year	1,203,224.84
Total to be accounted for	2,574,693.41
Disbursed during the year	114,055.35
Outstanding bills	1,597,685.44
Unobligated balance	862,952.62
Total accounted for	2,574,693.41

REPLACING MEDICAL SUPPLIES, 1920–21.

Amounts accruing to this fund during the year	$785,744.30
Disbursed during the year	2,598.59
Outstanding bills	614.86
Unobligated balance	782,530.85
Total accounted for	785,744.30

REPLACING MEDICAL SUPPLIES, 1919–20.

Balance on hand, July 1, 1919	$214,022.68
Amounts accruing to this fund during the year	1,652,233.15
Total to be accounted for	1,866,255.83
Disbursed during the year	96,607.20
Outstanding bills	409,003.95
Unobligated balance	1,360,644.68
Total accounted for	1,866,255.83

REPLACING MEDICAL SUPPLIES, 1918–19.

Balance on hand, July 1, 1919	$174,445.51
Amounts accruing to this fund during the year	251,361.57
Total to be accounted for	425,807.08
Disbursed during the year	9.75
Outstanding bills	12,536.46
Unobligated balance	413,260.87
Total accounted for	425,807.08

REPLACING MEDICAL SUPPLIES, 1917–18.

Balance on hand, July 1, 1919	$1,462.72
Amounts accruing to this fund during the year	140,028.80
Total to be accounted for	141,491.52
Outstanding bills	9.25
Unobligated balance	141,482.27
Total accounted for	141,491.52

HOSPITAL CARE, CANAL ZONE GARRISON, 1920.

Appropriated for the fiscal year 1920	$50,000.00
Disbursed during the year	7,346.96
Outstanding bills	6,671.04
Unobligated balance	35,982.00
Total accounted for	50,000.00

HOSPITAL CARE, CANAL ZONE GARRISON, 1919.

Transferred from S. S. and T. funds, act of July 11, 1919	$400.00
Refundments during the year	2,397.80
Total to be accounted for	2,797.80
Disbursed during the year	2,741.80
Unobligated balance	56.00
Total accounted for	2,797.80

HOSPITAL CARE, CANAL ZONE GARRISON, 1918.

Balance on hand July 1, 1919	$2,966.00
Disbursed during the year	481.70
Unobligated balance	2,484.30
Total accounted for	2,966.00

ARMY MEDICAL MUSEUM, 1920.

Appropriated for the fiscal year 1920	$10,000.00
Disbursed during the year	4,004.47
Outstanding bills	3,995.53
Unobligated balance	2,000.00
Total accounted for	10,000.00

ARMY MEDICAL MUSEUM, 1919.

Balance on hand July 1, 1919	$1,460.30
Refundments during the year	9.10
Total to be accounted for	1,469.40
Disbursed during the year	1,428.35
Outstanding bills	41.05
Total accounted for	1,469.40

ARMY MEDICAL MUSEUM, 1918.

Balance on hand July 1, 1919	$2.27
Unobligated balance	2.27

LIBRARY, SURGEON GENERAL'S OFFICE, 1920.

Appropriated for the fiscal year 1920	$20,000.00
Disbursed during the year	4,658.00
Outstanding bills	11,367.91
Unobligated balance	3,974.09
Total accounted for	20,000.00

LIBRARY, SURGEON GENERAL'S OFFICE, 1919.

Balance on hand July 1, 1919	$17,424.24
Refundment, during the year	3,247.85
Total to be accounted for	20,672.09
Disbursed during the year	19,668.75
Outstanding bills	1,003.34
Total accounted for	20,672.09

LIBRARY, SURGEON GENERAL'S OFFICE, 1918.

Balance on hand July 1, 1919	$1,213.98
Disbursed during the year	1,135.43
Unobligated balance	78.55
Total accounted for	1,213.98

ARTIFICIAL LIMBS, 1920.

Appropriated for the fiscal year 1920	$50,000.00
Disbursed during the year	37,078.00
Outstanding bills	9,200.00
Unobligated balance	3,722.00
Total accounted for	50,000.00

ARTIFICIAL LIMBS, 1919.

Balance on hand July 1, 1919	$12,451.60
Disbursed during the year	7,422.15
Unobligated balance	5,029.45
Total accounted for	12,451.60

ARTIFICIAL LIMBS, 1918.

Balance on hand July 1, 1919	$35,673.00
Disbursed during the year	223.63
Unobligated balance	35,449.37
Total accounted for	35,673.00

TRUSSES FOR DISABLED SOLDIERS, 1920.

Appropriated for the fiscal year 1920	$1,500.00
Disbursed during the year	495.33
Outstanding bills	404.67
Unobligated balance	600.00
Total accounted for	1,500.00

TRUSSES FOR DISABLED SOLDIERS, 1919.

Balance on hand, July 1, 1919	$1,241.70
Disbursed during the year	189.29
Outstanding bills	25.00
Unobligated balance	1,047.41
Total accounted for	1,241.70

TRUSSES FOR DISABLED SOLDIERS, 1918.

Balance on hand, July 1, 1919	$1,159.38
Unobligated balance	1,159.38

APPLIANCES FOR DISABLED SOLDIERS, 1920.

Appropriated for the fiscal year 1920	$1,000.00
Disbursed during the year	292.20
Outstanding bills	407.80
Unobligated balance	300.00
Total accounted for	1,000.00

APPLIANCES FOR DISABLED SOLDIERS, 1919.

Balance on hand, July 1, 1919	$553.56
Disbursed during the year	101.01
Unobligated balance	452.55
Total accounted for	553.56

APPLIANCES FOR DISABLED SOLDIERS, 1918.

Balance on hand July 1, 1919	$535.41
Outstandnig bills	3.00
Unobligated balance	532.41
Total accounted for	535.41

GENERAL SUMMARY OF ALL APPROPRIATIONS.

Balances on hand July 1, 1919		$98,676,080.36
Appropriated for the fiscal year 1920		6,132,500.00
Refundments to Medical and Hospital Department		8,504,017.45
Accrued to replacing medical supplies		2,829,367.82
Transferred from S. S. and T. funds, act of July 11, 1919		400.00
Refundments to hospital care, Canal Zone garrison		2,397.80
Refundments to Army Medical Museum		9.10
Refundments to library, Surgeon General's Office		3,247.85
Total to be accounted for		116,148,020.38
Disbursed during the year from—		
Medical and Hospital Department	$25,437,510.58	
Replacing medical supplies	99,215.54	
Hospital care, Canal Zone garrison	10,570.46	
Army Medical Museum	5,432.82	
Library, Surgeon General's Office	25,462.18	
Artificial limbs	44,723.78	
Trusses for disabled soldeirs	684.62	
Appliances for disabled soldiers	393.21	
Total disbursed		25,623,993.19
Outstanding bills chargeable to—		
Medical and Hospital Department	83,782,713.29	
Replacing medical supplies	422,164.52	
Hospital care, Canal Zone garrison	6,671.04	
Army Medical Museum	4,036.58	
Library, Surgeon General's Office	12,371.25	
Artificial limbs	9,200.00	
Trusses for disabled soldiers	429.67	
Appliances for disabled soldiers	410.80	
Total outstanding		84,237,997.15
Unobligated balances from—		
Medical and Hospital Department	3,495,261.59	
Replacing medical supplies	2,697,918.67	
Hospital care, Canal Zone garrison	38,522.30	
Army Medical Museum	2,002.27	
Library, Surgeon General's Office	4,052.64	
Artificial limbs	44,200.82	
Trusses for disabled soldiers	2,786.79	
Appliances for disabled soldiers	1,284.96	
Total unobligated		6,286,030.04
Total accounted for		116,148,020.38

Balances on hand July 1, 1919	98,676,080.36
Appropriated for the fiscal year 1920	6,132,500.00
Refundments during the year	8,509,672.20
Accrued to replacing medical supplies	2,829,367.82
Transferred from S. S. and T. funds, act of July 11, 1919	400.00
Total to be accounted for	116,148,020.38
Disbursed during the year	25,623,993.19
Outstanding bills	84,237,997.15
Unobligated balance	6,286,030.04
Total accounted for	116,148,020.38

LIBRARY OF THE SURGEON GENERAL'S OFFICE.

During the fiscal year 1919–20, 40,283 books and 5,475 pamphlets were added to the library collections, with 446 portraits of physicians. The library now contains 238,779 bound volumes, 35,496 unbound volumes, and 366,925 pamphlets, in all a total of 641,200 volumes and pamphlets, with 6,077 portraits of physicians, 149 medical engravings and prints, and 358 medical caricatures. Exclusive of transactions of societies, the number of current medical periodicals now received in the library is about 1,300. Of these, 1,238 are kept on the open shelves in the reading room. During the fiscal year 1919-20 practically all the medical periodicals of Germany and Austria which were lacking in the periodical collections have come in, and the current numbers of these are now received from week to week. The larger German medical serials are also on their way to this office.

The second volume of the third series of the index catalogue of the library, covering author and subject titles from "Arnal" to "Blondlot," was officially transmitted to the Surgeon General on February 10, 1920, and has now been published and distributed. This volume contains 2,983 author titles and 32,204 subtitles, of which 29,504 are articles indexed in medical periodicals.

During the fiscal year important constructive work has been done in the matter of rearranging the bound volumes in the bookstacks in the library hall, with a view to reclassification and permanent shelf listing along approved modern lines. This work has been undertaken partly because the old shelf classification of many years' standing is now obsolete, and partly in view of the possibility of the acquisition of a new building for the library at the Walter Reed General Hospital. With a modern reclassification of the alcoves and definite shelf lists, it will be possible to transport the books under any given subject intact in packages and place them in definitely selected positions in the enlarged bookstacks of the prospective building without any change of alphabetical order or loss of material. Six Hospital Corps men were detailed by the Surgeon General for this work, which has gone on continuously through the year. In spite of many interruptions, a large part of the material has been rearranged, and it is believed that a complete classification and complete shelf lists can be prepared long before the necessity of moving the collection.

During the present year the library has lost no less than 10 of its personnel of 29 members, and with this diminution of resources it will be difficult to carry on all the library work without replacement in some of the above vacancies.

MEDICAL DEPARTMENT ACTIVITIES WITH THE AMERICAN FORCES IN EUROPE AND SIBERIA.

MEDICAL DEPARTMENT, AMERICAN FORCES IN FRANCE.

JULY 1 TO DECEMBER 31, 1919.

This office operated as the chief surgeon's office, American Expeditionary Forces, until September 1, 1919, and after that date as chief surgeon's office, American Forces in France, but the work was continuous and of the same character, except that under the latter title no jurisdiction was had over the American Forces in Germany.

The work of the office can best be summarized under headings as follows:

PERSONNEL.

This involved the orderly return to the United States for demobilization of the large sanitary personnel remaining on July 1. Release of temporary officers and men was facilitated, and they were replaced by Regulars where necessary. Various Regular officers were selected and detailed to the Polish Typhus Relief Expedition. Close liaison was maintained with the American Forces in Germany, and many specially-qualified officers and men supplied them as needed and as they could be spared from France. Owing to defective reports, several thousand individuals were unaccounted for on the personnel records. Special details were put in the central records office and the adjutant general's office, all sailing lists secured and checked, and the central post-office records consulted. By these means the personnel records were made very nearly complete before being forwarded to Washington.

FINANCE.

(*a*) Claims for services rendered or supplies delivered to various hospitals and units throughout France were investigated and vouchers prepared and paid during the above period.

Many of the accounts paid during this period were of long standing, the original bills having apparently been lost. Investigations of these charges were difficult on account of insufficient receipts or orders having been given by American officers who received the supplies or engaged the services and on account of the impossibility of getting in touch with the officers or units, they having returned to the United States.

After November 15 no further payments were made by the Medical Department, but all vouchers were prepared and submitted to the quartermaster disbursing officer for payment. Since the medical disbursing officer ceased to function, a total number of 70 claims for services rendered or supplies delivered (many of these being final settlements covering a series of transactions with the various persons

or companies and requiring a complete check of all bills rendered and paid in order to avoid duplication) were investigated and vouchers prepared for submission to the Quartermaster for payment.

(*b*) Bills for hospital treatment of allied soldiers in American hospitals were prepared from the reports of the hospitals and submitted to the various Governments in accordance with prevailing orders.

(*c*) Bills from the French Government for delivery of supplies and treatment of American soldiers in French hospitals were checked (115 bills received during this period). These bills, as well as the bills submitted to the French Government, were included in the general settlement between the French Government and the Liquidation Commission of November 29, 1919.

(*d*) Invoices covering supplies sold by the Medical Department to private individuals, firms, and allied Governments or liberated countries were checked and bills prepared and submitted covering same.

(*e*) Vouchers were prepared covering supplies delivered to the American Expeditionary Forces in France by the British Government for submission to London for payment.

SUPPLIES.

Besides the issue of supplies for current use, the supply division has handled the shipment to the United States of a considerable amount of property ordered returned, transferred to the Red Cross $10,000,000 worth of supplies as provided by act of Congress, made deliveries to various purchasers as indicated under the finance heading, and finally delivered the balance to the French Government under the purchase agreement. A preliminary settlement of the accountability of many organization medical supply officers was also made.

HOSPITALIZATION.

Sufficient hospitalization was always maintained, but base and camp hospitals were released as rapidly as they could be spared. Arrangements were made for civil hospitalization in Paris during December. The liability of the Government for the medical care of civilian employees was eliminated by the adoption of a new form of contract. Full information as to securing civilian attendance for officers and men to whom Army medical attendance might not be available was published for use of personnel on detached service.

SANITATION.

The chief work under this heading was the continuance without letup of the most vigorous antivenereal campaign and the establishment and maintenance of four large segregation camps at Gievres, Bordeaux, St. Nazaire, and Brest for the treatment of venereal cases. The small balance of venereal cases were returned as patients for the completion of their treatment in the United States. These activities were successful in carrying out the purpose that only venereally clean personnel should be demobilized. The inspections and detention also eliminated lousiness and skin infections among returning troops. There have fortunately been no epidemic outbreaks of disease to handle during the period, excellent general sanitation having been maintained.

TRANSPORTATION.

One hospital train was transferred to Germany. The others were released as fast as they could be spared, the last one early in October, shortly after the repatriation of the last sick prisoners of war. After that time necessary railway transportation was successfully carried out by ordinary train, necessary attendants being assigned. Motor transportation was similarly disposed of by turning it in as rapidly as it could be dispensed with.

SICK AND WOUNDED RECORDS.

The bulk of the medical records were shipped to the United States about the beginning of the period covered by this report. A branch of this office continued to collect and tabulate records of American patients in French hospitals until November 30, when the work was completed. Current records were checked for correctness and transmitted to the Surgeon General as received.

MEDICAL DEPARTMENT, AMERICAN FORCES IN GERMANY.

From the Date of Occupation to May 31, 1919.

SANITATION.

Organization.—The department of sanitation was established the first part of January, 1919, after the Army had been stabilized in the area of occupation.

Epidemiology.—An Army epidemiologist has been attached to the office of the sanitary inspector. His work has been the collection and compilation of data on sickness in the Army, the dissemination of this information in the publication of memoranda and a "Weekly Health Bulletin," and the formulation of measures for the control of communicable disease. Field work by the epidemiologist has not been required, because no extensive outbreak of infectious disease, aside from widespread influenza, has occurred.

Sanitary inspector.—Territorial sanitation by sanitary squads as Army units was not considered to be necessary after divisions had become stabilized in the areas. It was decided that the divisions, with the usual divisional medical and sanitary personnel, would be able to carry on continuous sanitary work in their permanent areas without the assistance of a separate Army sanitary force. This plan has resulted satisfactorily and, as records of sanitary conditions in the various areas are kept in the office of the sanitary inspector, no difficulty has been experienced in furnishing incoming divisions with the essential information regarding the sanitary conditions of the areas which they were entering.

Housing.—In the area of occupation about 10 per cent of the troops are quartered in barracks, while about 90 per cent are billeted with civilians in cities and villages. The civil sanitary arrangements vary from crude, primitive methods of water supply and refuse disposal to the fairly well organized sanitary systems of the larger cities. The number of soldiers in this area, approximately 250,000, has practically doubled the population. So severely has this increased

density of population taxed the general living arrangements, water supplies, and conservancy system that a considerable part of the sanitary work of the Third Army has been to increase the capacity of these rural and municipal systems. In this work, water supplies have been increased, barracks built to obviate overcrowding, and mess halls erected to provide shelter for men at meals.

Disease prevention.—Infectious diseases, with conditions highly favorable to their transmission to troops, were found to be prevalent among the civilians. The chief widespread epidemic diseases are typhoid fever and diphtheria. The arrangements for dealing with the civil phases of the situation are in the hands of the chief sanitary officer, civil affairs, advance general headquarters, at Treves. By a close coordination between the medical organization of the Third Army, the chief sanitary officer of the section of civil affairs, and local German health officials reports on infectious diseases among civilians and reports of typhoid fever carriers have been obtained systematically. Through this system the Army has exercised a control over disease among the civilians and has enforced various measures for improvement of civil sanitation.

Delousing and bathing.—This was an urgent sanitary problem during January. At that time approximately 90 per cent of the men were infested with lice, consequent upon the lack of bathing and delousing facilities in the zone of combat and on the march. Upon the stabilization of troops in this area energetic efforts were made to free the command of lice. Only one Foden thrash machine was available, and the facilities for bathing were inadequate. Much improvised apparatus was constructed by division medical establishments and by the engineers. Serbian barrels, Canadian hot-air disinfectors, cave disinfectors, and steam barrels supplied from tractor engines or factories were set up throughout the area. By these means, augmented later by standard steam disinfectors and portable shower baths, the louse infestation was rapidly reduced, until at present the degree of infestation, as determined by inspection, is not above 1 per cent.

Food, disposal of waste, etc.—During the first three months of 1919 the general camp sanitation of organizations of the Army has greatly improved. The problems depending for solution upon the supply of lumber and other materials have been efficiently handled by divisions and the Corps of Engineers. Improved construction of kitchens, screening of food receptacles, fly-proofing of latrines, and removal of manure piles and other breeding places of flies had progressed well toward completion before the commencement of the season when flies are expected to become prevalent. Supplies of clothing have been ample. Food supplies have been sufficient, of good quality, and generally handled with cleanliness during transportation. The efforts to provide men with amusements which give them facilities for sports and other recreation have been extensive and highly beneficial.

The water-supply service.—This has been found to be the only sanitary work requiring a definite Army organization as distinct from that of the divisions. The organization of the water-supply service was begun in the chief surgeon's office in January, when it was found

that purification of water supplies at their sources would be necessary in this area. Many of the towns in the area of occupation are supplied by water systems carrying tap lines to the houses. A number of these supplies were found on examination to be polluted, particularly in the towns in valleys of the Rhine, Moselle, and Ahr Rivers. Chlorination of water in Lyster bags is an inadequate control of drinking water for men who have free access to water from taps in houses. Consequently a water-supply service has been organized under officers of the Sanitary Corps, with one section in the chief surgeon's office and another section in the office of the chief engineer. The section in the chief surgeon's office is engaged chiefly upon conducting surveys and examinations of water supplies and recommending the installation of apparatus for systematic chlorination of water at suitable points. In this work the division field laboratories are being utilized as extensively as possible and are found to be of great value. The section in the chief engineer's office is concerned primarily with the assembling, construction, and installation of apparatus and the training and provision of personnel to operate the plants.

HEALTH OF THE TROOPS.

Statistics.—During the period January 1 to April 1 the strength of the Army remained constant, so that a comparison of hospital admissions from week to week during that interval may be taken as a means of judging the health of the Army. During the period January 1 to April 1, 1919, there were 31,486 soldiers who had to be evacuated from their commands to hospital on account of sickness of all kinds. The mean strength of the Army, excluding men on detached service, was 245,667. This gives a hospital admission rate during the period specified of 512 per thousand strength per annum for the entire Army. During April and May the hospital admission rate was markedly reduced, due in large part to the decrease in the incidence of respiratory infections. The rate for the week of May 26 was 142. During the week ending June 3 it rose to 209.

Infections of the respiratory tract have been responsible for the bulk of the sickness in the Army. During the interval specified above, there were 12,724 soldiers admitted to hospital with the diagnosis bronchitis, laryngitis, influenza or pneumonia, so that approximately 40 per cent of the total admissions to hospital were due to respiratory infections. In addition, a large number of cases were admitted to hospital with the notation "N. Y. D.," which were undoubtedly respiratory infections, so that the actual proportion of respiratory disease admissions to total sick admissions was probably in the neighborhood of 1 to 2, or 50 per cent. The number of cases of respiratory infection decreased rapidly during the months of April and May and were the cause of but a small per cent of the total admissions.

The hospital admission rate for sickness of all causes during the first week of January was 526. From that time on it rose steadily, reaching the maximum during the week ending February 18, when it attained the figure 795. From that time on it decreased rapidly, falling to less than half the maximum in a period of three weeks. The lowest figure attained during the period January 1 to April 1 was that for the week ending April 1, when the admission rate for

sickness of all causes amounted to 252 per thousand per annum. The lowest rate of admission attained in the Army at any time was that for the week of May 20, 142.

Respiratory diseases.—Of the respiratory infections, influenza was the most prevalent, and may be said to have been epidemic during the months of January and February. Some organizations were affected to a much greater extent than others: for example, the Third Corps troops and the 2d Division had much higher sick rates (respiratory disease rates) and death rates than did the 1st and 32d Divisions, although these four organizations were located in the bridgehead sector on the right bank of the Rhine, and their areas were continuous.

Respiratory infections were responsible for a large proportion of the deaths that occurred in the Third Army during the period January 1 to April 1. During this interval there were 664 deaths from disease, and of these, 595 or 89 per cent were due to pneumonia. The death rate from disease for the entire Army for the period specified was 10.8 per thousand per year.

Diphtheria.—Diphtheria was the most prevalent of the reportable communicable diseases. An analysis of the cases by companies has shown that 80 per cent of the cases were single cases occurring in a company in the entire period of 13 weeks; also that diphtheria was most prevalent in the organizations having the highest respiratory disease rate.

Typhoid fever.—Typhoid fever has been present in the Third Army since its formation, but the incidence of this disease has fallen off noticeably since the Army has settled down and opportunity has been afforded for the establishment of improved sanitation. During the interval December 22 to March 11, 63 cases of typhoid fever were reported from organizations of the Third Army. An analysis of these cases with reference to date of onset of the disease brought out the fact that in the majority infection was acquired either during the march to the occupied territory or in the days immediately following the arrival of organizations at their destinations. Since that time the incidence of typhoid fever in the Army has been in no sense alarming, and in one or two instances the infection was known to have been acquired outside the occupied territory. Revaccination of the Army with lipo-vaccine was commenced in March.

Nephritis, trench fever, etc.—A number of cases of acute nephritis have been seen in all of the evacuation hospitals. The condition was similar to that described in the British Army as trench nephritis.

Early in January it was noted in a number of field hospitals that there was a condition of painful skins, often combined with general febrile symptoms. Upon close analysis these were discovered to be cases of trench fever. Because several days or weeks observation are required to confirm this diagnosis, in many patients the condition was not detected in the division or evacuation hospitals during the period of active operations. Statistics as to the actual number of cases are inaccurate because of the difficulty of diagnosing the disease in the presence of an epidemic of influenza, both of which conditions have similar manifestations at the onset. In the areas of the Third and Fourth Corps 248 cases were diagnosed. The effect of active delousing campaigns was well brought out by the decrease in the number of cases during March.

EVACUATION HOSPITALS.

The first evacuation hospitals to operate in Germany were No. 3, which reached Treves on December 3, 1918, and No. 12, which arrived at Treves on December 4. The former relieved a Fourth Corps field hospital which had taken over a German hospital on December 1. In it were a number of allied prisoners of war, including 50 American wounded. Evacuation Hospital No. 12 established itself in another group of buildings near those of No. 3.

When the divisions reached their final areas during the week of December 15, additional evacuation hospitals arrived. It was planned to have them function as base hospitals in order that as many patients as possible might be retained in the Army and returned to duty. To this end these hospitals were equipped as completely as possible with well-trained personnel and adequate supplies. Without exception, they were unusually well housed in suitable buildings, a few of which had been constructed for hospital purposes; others were in large schools and military barracks previously used by the Germans to care for the sick.

HOSPITAL CENTERS.

Coblenz.—It was the policy, as far as possible, to group the hospitals in centers so that special services could be more highly developed. The large area over which the Third Army is spread made it necessary, however, to place a few isolated hospitals at outlying points. The largest center was situated in Coblenz. Here Evacuation Hospital No. 6 was established in a splendidly equipped German military hospital. This was used for surgical and orthopedic cases and for sick officers and nurses. Evacuation Hospital No. 2 had in addition a urological and contagious service. Evacuation Hospital No. 4, located in a schoolhouse on Oberwerth Island, had the eye, ear, nose, and throat cases, as well as small medical service. Evacuation Hospital No. 14 took over the Bruderhaus Hospital and later a military hospital in Ehrenbreitstein. This included neuro-psychiatric and medical services and in addition was used as the triage to which all patients received in Coblenz were sent and from there distributed to other hospitals.

Treves.—The second center, at Treves, consisted of Evacuation Hospitals No. 3 and No. 12. In the former were developed surgical, orthopedic, eye, ear, nose, and throat, and medical services: in the latter urological, neuro-psychiatric, contagious, and medical services.

SEPARATE HOSPITALS.

To serve the more remote areas, Evacuation Hospital No. 8 was located in Mayen and Evacuation Hospital No. 7 in Prum. In order to care properly for the 42d Division at the extreme left of the area it was considered necessary to have an evacuation hospital at Neuenahr. This was accomplished during the middle of February, 1919, when Evacuation Hospital No. 26 established itself in a large hotel providing 1,000 beds.

The Sixth Corps was attached to the Third Army during the first two weeks in April, and with it Evacuation Hospital No. 13, at Wolferdange, near the city of Luxemburg. This hospital remained

attached to the Third Army after the disbanding of the Sixth Corps. It was established in a chateau affording 150 beds. Additional beds to the total of 500 were provided in tents. Because of its limited capacity the hospital continued to function more as an evacuation hospital, sending many of its cases to the center at Treves.

Some of the divisional and corps field hospitals were put in operation, but retained only those cases which could be returned to duty in a few days. An exception was made in the case of the 90th Division, which occupied a large area. Here it was considered advisable, because of the long distance to Treves, to equip a field hospital at Cues with female nurses and a good medical staff, in order that pneumonia cases might be hospitalized.

During March certain of the evacuation hospitals which had been longest in the American Expeditionary Forces were relieved by others with a shorter term of service overseas, as follows: No. 2 by No. 49, No. 6 by No. 27, No. 4 by No. 22, No. 8 by No. 30, No. 7 by No. 29, and No. 3 by No. 19. Evacuation Hospital No. 16 relieved Evacuation Hospital No. 14 on April 3. The retention with one exception of the old commanding officers and of some of the medical directors resulted in a continuity of policy. The decrease in the size of the Army led to the closing of the following evacuation hospitals in May: Evacuation Hospital No. 9, Coblenz; Evacuation Hospital No. 12, Treves; Evacuation Hospital No. 29, Prum. None of the special services in these hospitals was discontinued, however, each being carried on in one of the hospitals remaining. It was assured that with the contraction of the medical activities coincident with that in the size of the Army, the character and adequacy of the service did not suffer.

EVACUATION OF PATIENTS.

The epidemic of respiratory infections during January and February necessitated frequent evacuations to the Services of Supplies. Occasionally the congestion of the hospitals in the Coblenz center was lessened by sending convalescent patients to Treves. Since the stabilization of the Army in the occupied area, patients to be evacuated to the Services of Supplies have been collected at the hospital centers.

CONVALESCENT SECTIONS.

Since the early part of March, 1919, the steady decline in the hospital admission rate made it possible to retain a much larger number of patients in the Army until they could be sent to duty or it could be demonstrated that they should be returned to the United States. This policy created the necessity for convalescent sections in the hospital centers. One of these was organized at Evacuation Hospital No. 19, Treves; one at Evacuation Hospital No. 9, Coblenz; and one at Evacuation Hospital No. 26, Neuenahr.

LABORATORY SERVICE.

The Third Army laboratory service consisted of 2 Army laboratories, 10 evacuation hospital laboratories, 7 division laboratories, and limited laboratory facilities in isolated field hospitals, with 47 com-

missioned officers. Those laboratories attached to evacuation hospitals with hospitals and divisions were decreased in number commensurate with the size of the Army. The laboratories have been distributed and their work divided and coordinated so that the entire Army has immediate access to excellent pathological, bacteriological, chemical, and serological facilities. For the month of March, 1919, 143 post-mortem examinations were made and 27,459 specimens were examined. In addition to the routine work of the service, extensive bacteriological surveys of the water supplies in the Third Army area and surveys for chronic carriers of typhoid, paratyphoid, and dysentery bacilli among the troops are in progress. Several research problems have been taken up, one on the earliest evidence of tuberculosis infection, at the request of Col. Bushnell; another on the pneumonias; and still others prompted by the interest of particular officers.

PROFESSIONAL SERVICES.

Medical service.—The major part of the professional work in the hospitals and divisions of the Army has fallen upon the internists, due to the fact that by far the greater number of cases admitted to hospital were for medical, rather than surgical, conditions. It was realized that the evacuation hospitals had been organized principally for the surgical work and that their personnel and equipment would not be adequate for the type of cases now to be treated. In January the staffs were supplemented with a number of good internists. A medical service under a competent chief was maintained in each hospital, and much shifting of personnel was done to put each service on the most efficient footing possible.

Urological service.—Immediately after the arrival of the Third Army in the occupied area an attempt was made to put in operation a very definitely standardized program for the control of venereal disease. This has the vigorous support of both the line and medical officers, and its effectiveness may be judged from the venereal records of the Army. The venereal rate has constantly been lower than that of the entire American Expeditionary Forces, and has almost always been lower than that of either of the other two field armies. A careful survey and census was made, and all of the chronic syphilitics and gonorrhoeics were combed out, segregated, and treated. In some divisions they were retained in hospital during the course, in others they were brought in once a week for their treatments. Both plans were quite satisfactory. There was an average of 60 syphilitics per division who required further treatment and care. This was regarded as one of the most important features of the venereal program, as the majority of these men would go home and neglect themselves, to find some years later that they were chronic invalids.

There were venereal services in five of the evacuation hospitals, so situated as to serve all the units of the Army—Coblenz, Treves, Mayen, Prum, and Neuenahr. The latter two were given up with the closing of the hospitals in Prum and Neuenahr during May. The services are well organized, well equipped, and doing good clinical work. While the Army was at its maximum strength there were on an average of 500 to 600 venereal cases under care at these five hospitals.

The increase in venereal rate in the Third Army was coincident with the granting of special leave, which was responsible for from 55 to 75 per cent of all infections occurring in the Army.

Surgical service.—The majority of the surgical conditions treated have been of the same nature as those seen in civil practice. Of special interest have been a number of cases of abscess of the rectus abdominis muscle complicating influenza and pneumonia. Although it has been the policy to send the more serious cases to the centers at Coblenz and Treves, it was necessary also to have a well-trained surgical staff and complete equipment in each of the outlying evacuation hospitals in order to care for emergency cases, such as those of acute appendicitis, which it would be unwise to transport.

Attention of the surgical department has been attracted to the number of serious injuries resulting from avoidable accidents. A campaign was started during April to check these accidents by keeping statistics of the cases admitted to the evacuation hospitals and by giving as much publicity as possible to these. On April 11, 1919, there were 480 surgical cases in Evacuation Hospitals No. 27 and No. 19 that were caused by accident. There were 8 deaths due to automobile accidents during March. From January 1 to April 11 there were 60 deaths in the Third Army from accidental injuries from all causes.

Orthopedic service.—Fractures and dislocations as well as other bone and joint conditions have been cared for by the orthopedic section. Special services were developed at Evacuation Hospital No. 6 at Coblenz and Evacuation Hospital No. 3 at Treves; but in addition to these there was, at first, a small service in each of the evacuation hospitals apart from those in the centers, under an orthopedic surgeon. In February it was considered advisable to withdraw these smaller services and to send all orthopedic cases to one of the two centers. This was effected and it resulted in greater efficiency in the treatment of the cases. Orthopedic surgeons with special training in the treatment of fractures have been assigned to the staffs of these centers. They have been supplied with the most modern and complete appliances including portable bedside X-ray apparatus. It is believed that the character of the work of these services has been of a high standard. As far as possible all cases of fracture that could be returned to duty within two or even three months have been retained in the Army. In order to restore them sooner physic and occupational therapy departments were established at Coblenz and Treves.

After the Army had settled down from its march, the number of foot ailments and other minor orthopedic conditions among the troops was small. The orthopedic consultants were withdrawn from most of the corps and divisions. An effort has been made to keep up the standard of the splinting which in general has been high.

Neuropsychiatric service.—Plans were made early for the adequate care of neurological and psychiatric cases and became effective as rapidly as personnel could be assembled. It was believed that neurological cases can receive better treatment in special hospital services and psychiatric cases must be more or less segregated. The close relation existing in the American Expeditionary Forces between neurologists and psychiatrists was naturally continued. Psychiatric cases require early detection, diagnosis, and treatment;

hence the policy of the Army has been to keep the division psychiatrists available and to maintain services in convenient Army hospitals. Through such arrangements it would be easy for any medical officer to consult a specialist in mental disorders, and judges advocate and prison officials need not delay in obtaining medical advice on their problems when they desire it. It was arranged that special attendants might be called to any place in the Army area to bring difficult patients to the hospital. Two neuropsychiatric units were established, one with Evacuation Hospital No. 14 at Coblenz and one with No. 12 at Trier.

The Coblenz plant was particularly well equipped with hydrotherapeutic, electrotherapeutic, and Zander apparatus. In both hospitals emphasis has been laid on occupation therapy in shop and ward. It has been possible to extend this work beyond this service and offer its benefits to medical and venereal cases.

On evacuation to the Services of Supplies psychic cases have been accompanied by trained attendants, and usually a medical officer has gone with each convoy. So far as possible, these patients have been placed on hospital trains going direct to the special base hospital for such cases. Psychoses and most psychoneuroses have been thus evacuated, there being no special need for restoring them to duty, but the policy has been to hold excited patients at our hospitals until quiet enough to travel with reasonable safety.

Opthalmological service.—After stabilization of the Army in permanent areas, Evacuation Hospital No. 4, Coblenz, and No. 3, Traves, were designated as eye centers, and given extensive equipment, including magnet installation for care of foreign body cases. Eye departments were provided in all other evacuation hospitals for cases arising in those commands and among adjacent troops.

Oto-laryngological service.—The experience of the Third Army as far as this department is concerned has not materially differed from that of the precombative period last winter in France, or from that of previous civilian experience. During the mobile period when the weather was bad and billeting and sanitary arrangements were necessarily imperfect many acute inflammatory conditions of the upper respiratory tract were reported. With improved conditions following stabilization, a marked reduction has occurred. Of the evacuation hospitals in the Army area, two have been specially named to which cases belonging to this department are triaged, No. 22 in Coblenz and No. 19 in Treves. The bulk of the work has been done in these two hospitals, although a competent oto-laryngologist has been maintained in each of the other hospitals for the care of its own personnel and for the treatment of oto-laryngological cases arising in its wards.

Dental service.—Until late in December, 1918, the troops composing the Third Army had been so continuously active or on the march that nothing but emergency dental treatment could be given with the result that when they finally reached their destination in Germany there were large numbers of cases requiring immediate attention. Steps were taken to supply deficiencies in dental personnel and equipment so that routine treatment could be undertaken. The cases requiring immediate attention were taken care of first, then routine examination and treatment were begun.

From June, 1919, to May, 1920.

On June 28, 1919, Germany signed the terms of peace, and the return of the Third Army to the United States began. This had already been reduced to four divisions. The movement of all the troops was completed in 38 days, and on August 4, 1919, nothing remained but the organizations constituting the American Forces in Germany, namely, the 8th Infantry; three batteries, 6th Field Artillery; the 7th Machine Gun Battalion; Company A, 1st Engineers, a field signal battalion; Motor Command No. 41; a mounted detachment; some headquarters troops; quartermaster detachment; ordnance detachment; military police company; and the Medical Department organizations, consisting of Field Hospital No. 13, Evacuation Ambulance Company No. 26, and certain additional personnel necessary, together with the field hospital and ambulance company to operate a 1,000-bed base hospital, medical supply depot, attending surgeon's office at Coblenz, and a 75-bed fort hospital at Antwerp. On August 30, 1919, the American Expeditionary Forces were divided into the American Forces in France and American Forces in Germany.

Instructions were first received to plan a Medical Department organization for a force of approximately 6,500 troops. It soon, however, became apparent that the strength of the American Forces in Germany would be much larger than was originally planned. A provisional guard battalion, consising of about 1,000 men, was shortly afterwards added, also Company B, 1st Engineers, and information was received that the Silesian Expeditionary Forces would be sent from the United States and held in the American occupied area until the peace terms were ratified by the United States, then to proceed to the plebecite districts of Danzig, Allenstein, and upper Silesia. They arrived November 4, 1919, and consisted of the following organizations: 5th Infantry; 50th Infantry; Provisional Machine Gun Battalion; Company D, 1st Engineers; Motor Command No. 34; Service Park Unit No. 540; signal detachment; Mobile Ordnance Repair Shop No. 12; and a provisional sanitary train composed of Ambulance Company No. 6 and Field Hospitals No. 6 and No. 8.

As the Third Army was reduced in size and during the release of the final divisions, the various evacuation hospitals were closed and returned to the United States until Evacuation Hospital No. 27 alone remained. This occupied the buildings of the former German military hospital at Coblenz. It became the base hospital for the American Forces in Germany. The necessity of a convalescent camp for the treatment of venereal cases soon became apparent, and in September, 1919, the Festungshilfs-Lazarevy on Oberwerth, an island in the Rhine, and formerly occupied by Evacuation Hospital No. 22, was requisitioned for this purpose. The medical supply depot was first established in frame buildings at the base hospital, and later moved to brick buildings in the Magazine Barracks in the central part of Coblenz.

THE POLISH TYPHUS RELIEF EXPEDITION.

This was composed of approximately 25 officers and 500 enlisted men, and on October 19, 1919, was placed under the command of the American Forces in Germany. This expedition had been sent to Poland in August, 1919, to organize and conduct a campaign against typhus fever. In November, 1919, its personnel was reduced to 16 officers and 60 enlisted men. Its activities were to cease June 30, 1920, but authority was later granted by the War Department for an extension to November 1, 1920.

As finally organized, the Medical Department of the American Forces in Germany consists of—

Chief surgeon's office.
Attending surgeon's and dental surgeon's office.
Medical supply depot.
Base Hospital, including—
    Convalescent Camp.
    Field Hospital No. 13.
    Evacuation Ambulance Company No. 26.
    Hospital Train No. 70.
    Field Hospital No. 6.
    Field Hospital No. 8.
    Ambulance Company No. 6.
Provisional Sanitary Train, 2d Brigade.
Port surgeon's office, Antwerp.
Port Hospital, Antwerp.
Medical Department personnel on duty with the various organizations operating infirmaries and prophylactic stations.
Veterinary service (chief veterinary officer in office of chief surgeon and veterinary officers on duty with mounted organizations).
Polish Typhus Relief Expedition (attached).

HOSPITALIZATION.

With the establishment of a more permanent Army of Occupation, composed of Regular troops, the plan of hospitalization must necessarily change. Instead of evacuating to the United States each patient not expected to return to duty within a short period, all except surgeon's certificate of disability cases were to be retained and treated in Germany. The Base Hospital was established, and the sick from the various organizations were collected daily and treated in this hospital. This assured the proper segregation of contagious diseases, also enabling patients to receive the benefit of the best modern diagnostic methods and treatment by specialists. As more troops were added to the American Forces in Germany the Base Hospital soon became overcrowded and had to be enlarged by installing a convalescent camp and by building a number of temporary frame wards. The convalescent camp, with a capacity of 500 beds, has always been taxed to its full capacity with venereal patients and no room has been available for other convalescents. After the Silesian Expeditionary Forces arrived with Field Hospitals No. 6 and No. 8, it was decided to continue the same plan of treating all patients at the Base Hospital, thus eliminating the functioning of field hospitals. Although these troops were stationed outside of Coblenz, some at a distance of about 20 miles, this arrangement proved entirely satisfactory for reasons previously stated.

During the Third Army period an attending surgeon's office and an attending dental surgeon's office were run separately in Coblenz, the attending surgeon's office being a very old unsuitable building and in an undesirable location. At the beginning of the American Forces in Germany, these two offices were combined and placed in rooms on the lower floor of the German Postal Building. In anticipation of the arrival of the families of officers and enlisted men, an effort was made to improve and perfect their service.

Hospital Train No. 70 was turned over to the American Forces in Germany and placed in use, evacuating the surgeon's certificate of disability cases to Antwerp, Belgium, for return to the United States.

At first the sick from the personnel on duty at the base port of Antwerp were treated in the Belgium Military Hospital. This was not satisfactory and the establishment of a small port hospital of 75 beds was urgently recommended. After considerable delay due to the difficulty of obtaining suitable buildings, this hospital was opened April 10, 1920, at No. 129 Rue d'Argile, Antwerp, Belgium.

The sick of the Polish Typhus Relief Expedition are treated in their own hospital located in Warsaw. More detailed histories and descriptions of the Base Hospital, Convalescent Camp, attending surgeon's office, and Port Hospital, Antwerp, follow.

Base Hospital.

The Base Hospital, American Forces in Germany, is located on Moselweis Weg, in the western section of the city of Coblenz. It occupies a group of buildings which at one time comprised the German garrison lazarret of Coblenz, and was used by the Germans in part as a hospital and in part as a medical-supply depot. There are 13 two-story concrete buildings, white stone foundations, stone-lined entrances and windows, all of which are of modern type and in good repair, and they have a normal bed capacity of 460. To these are added 5 temporary buildings, with 152 beds, located in a lot across the street from the hospital. As a recent addition to the hospital there has been added by the Americans wooden frame buildings No. 18 to No. 26, inclusive, and No. 38. They are all temporary buildings of beaver-board wood and resemble the Cavinar Swiss huts or the Adrian type. They are heated by stoves and illuminated by electricity and have modern sewerage connections and flush latrines. There are also a series of wooden buildings (Adrian hut type) which were a part of the German hospital (32 to 35 inclusive, 40, 41, and 43) which are now being used as quarters for the detachment of Medical Department men and for the supply depot of this institution.

Prior to the entry of the Americans into Coblenz in December, 1918, this hospital had a permanent German staff of 8 doctors and 55 nurses, 12 of which were Sisters of St. Clemens, which was the nursing staff of the German lazarett before the war. To these were added 32 Red Cross nurses and 140 enlisted men. The number of the patients at the time numbered about 450, subdivided one-third surgical, 50 eye cases, 25 neurological, and remaining medical. During the German occupancy in October and November, 1918, there was a slight epidemic of influenza and pneumonia, with the resultant death rate of 2.5 per cent. The overflow of patients from this hospital was sent by the Germans to the neighboring hospitals, especially to the one on the

island of Coblenz now being used as a convalescent camp for venereals of the Base Hospital.

Lighting.—This is done by the central power plant which supplies the electricity throughout the permanent buildings of the hospital, except for the X-ray apparatus in building No. 3, and the buildings Nos. 29, 30, and 31, receiving ward and barracks along the right-hand wall of the hospital Nos. 36 and 37, detachment, latrine opposite power house, and temporary buildings Nos. 10, 11, 32, 33, 34, 35, 40, 41, 42, 44, and 46. The current for these wooden structures is obtained from the city. It is 120-volts direct current, and is transformed in hospital to 220 volts. In the buildings directly across the street current comes from the city, and is a direct current, 120 volts.

Heating.—Heat is furnished from the central system by means of large pipes which are fed from the boilers in the power house. All permanent buildings have ample radiators and heating is effective. All permanent buildings are also supplied with illuminating gas for their illuminating purposes.

Water supply.—The water supply is from the municipal water plant of the city of Coblenz. The source is several deep wells which are located on Oberwerth Island, in the Rhine. The water is pumped from the wells into the city system, and the Americans have found it necessary to frequently chlorinate it at its source. The Germans had planned to keep a water pressure of two atmospheres, but this is rarely reached, and has been especially difficult to attain since the arrival of our troops and its consequent great amount of water consumption. Now the pressure varies from one-half to one atmosphere. This caused at times severe embarrassment to the hospital, especially on the second floors, where often no water is obtainable for such purposes as flushing toilets, bathing and washing facilities. The same embarrassment reached its climax at the time of the rise of the waters of the Rhine and Moselle, when the Coblenz waterworks were temporarily put out of commission. No water was then available. The water is generally potable. It was examined by our laboratory 21 times during the month of April.

Sewerage.—Surface drainage is excellent, with well constructed and graded streets, and gutters which connect with the city system. All the buildings, permanent and temporary, are also connected with the city system. The plumbing, although modern, is not up to the American standard. Toilets have the overhead water-box arrangement for flushing. Piping connections are constantly leaking and are more or less under constant repair. The drains and sometimes sewer pipes are stopped up and occasionally cause flooding of floors in both bathrooms and toilets.

Mess department.—This hospital has four messes, namely, (*a*) patients', (*b*) detachment, (*c*) officers', (*d*) nurses'.

The hospital was originally equipped with a main diet kitchen capable of feeding 400 patients, but with the necessary expansion of the hospital and additional buildings it has been necessary for this kitchen to increase both its work and capacity. It has been able to accommodate over 1,000.

Laundry.—This consists of automatic washer, having a capacity of 2,000 pieces daily, and one extractor; both are run by electricity. Along the wall is a row of wooden bins in which the sorted linens are

deposited before being placed in the washer. All blood-stained linen is placed in a large tub filled with lukewarm water and allowed to stand 24 hours before being placed in the washer. When linen is ready for drying it is sent up to the drying room by means of a lift. This drying room is really the attic of the building, containing six large radiators. Along its walls are strung many wires, on which the clothing is hung to dry. The laundry is then sent to the ironing room, with which the drying room is connected, by way of a chute. In this room are old-fashioned irons heated by three gas burners. There is also a small drier in this room having four leaves. Here such articles as need rapid drying are dried.

Hospital train.—Hospital Train No. 70 forms a part of the Base Hospital, American Forces in Germany. It was purchased by the United States from the English and turned over to the Medical Department, American Expeditionary Forces, November 22, 1918. There being no further use for it in the American Expeditionary Forces, it was turned over to the American Forces in Germany the 23d of August, 1919. Prior to being turned over to Base Hospital it had made 51 trips and since then 6, 1 being to Brest and 5 to port of Antwerp.

German inspector.—The German inspector is a representative of the German Government for the hospital. His duties are the supervision of the German labor attached to the hospital, and he attends to the minor repairs of the hospital buildings, new installation, etc. All major repairs and new installations of the hospital are first referred to the American chief engineer for approval, after which he supervises their completion. The inspector in his duties is assisted by an interpreter. The skilled laborers consist of a head mechanic and four mechanics. Seventy-eight Germans are employed in various capacities around and about the institution.

Transportation.—The transportation of the Base Hospital, American Forces in Germany, consists entirely of motor vehicles.

PROFESSIONAL SERVICES AND INFECTIOUS DISEASES.

Surgical.—The surgical service is fortunate in having a suite of operating rooms in one of the permanent hospital buildings, designed for that purpose, and admirably arranged and equipped. The suite contains three large operating rooms, with tiled walls and floor, each equipped with running water and bowls for scrubbing. The X-ray laboratory is also situated in the operating suite, next to the preparation room, so that patients requiring radiographs before operation may be brought direct to the operating building.

The proportion of traumatic surgery, and especially of gunshot wounds, accidental and intentional, is inordinately high for troops living under a condition of practically peace time. This is, undoubtedly, due in a large measure to the ease with which alcoholic stimulants can be procured in this area, a large proportion of the cases of gunshot wounds and accidents being due directly or indirectly to alcoholism. Another factor in this high rate is probably the fact that a considerable proportion of the men in the organizations on duty here are very young men of short service.

Orthopedic.—The department was taken over from Evacuation Hospital No. 27. The working plans of the service had, in most

instances, been established prior to the organization of the Base Hospital, American Forces in Germany. The orthopedic service handles all injuries of the bones and joints, excepting cranial injuries, which were cared for under general survey. In addition, tendon and nerve lesions came in this department, as well as common foot ailments and the chronic arthritic conditions.

Medical.—The medical service had for its use in October, 1919, one modern two-story hospital building with a normal capacity of 90 beds, a well-equipped ward for neuropsychiatric cases, and two small buildings with a bed capacity of 34 beds for contagious diseases. These wards were divided into separate rooms, containing from 1 to 6 beds each. Each building had its own diet kitchen, from which special diets were served. The officer personnel at that time consisted of a chief of medical service and four ward surgeons. The average number of medical cases in the hospital at that time was 100. These, for the most part, were very largely acute respiratory affections, with practically no contagious diseases.

Influenza.—During October and November, 1919, we had a few sporadic cases of influenza, but it was not until the latter part of December, 1919, that we were visited by a comparatively severe epidemic of clinical influenza. On Christmas day we had 2 admissions for influenza; the following day, 9 admissions; the next day 8; and on December 29, 1919, the admission rate rose to 29. The average admission rate thereafter during the winter months was about 20 new cases per day. It was soon found that our housing space was totally inadequate, so we were forced to make use of some wooden frame buildings used by our medical supply depot. Each building was cubicled by the ordinary method of hanging sheets on wires.

Measles.—Coincident with the influenza epidemic, measles swept through the command. Here also we encountered an exceedingly fatal type of streptococcic broncho-pneumonia. Due to lack of space we were forced to keep uncomplicated measles in the same ward with broncho-pneumonia measles. Shortly afterwards, however, we segregated the measles complicated with broncho-pneumonia in a separate building and our pneumonia rate dropped immediately. We believe this illustrates the importance of droplet infection.

Diphtheria.—On admission, diphtheria cases are classified as clinical diphtheria, diphtheria carriers, and diphtheria suspects. Each type is segregated in a separate building. As soon as one negative culture has been obtained that case is placed in a separate building. Discharges are made after three negative cultures, three days apart.

Mumps.—At the present time the prevailing infectious disease is mumps.

The eye, ear, nose, and throat.—The eye, ear, nose, and throat department was a continuation of the work of Evacuation Hospital No. 27. We continued with the same commissioned, nursing, and enlisted personnel as before. The clinic, which was running all day and caring for from 50 to 100 cases daily at the time, continued on undisturbed.

Venereal and skin.—The genito-urinary department of Evacuation Hospital No. 27 (which later became "Base Hospital," American Forces in Germany) was established when 117 venereal patients were transferred from Evacuation Hospital No. 49 upon the departure of

that hospital for the United States, August 3, 1919. To this service was added the patients already in hospital suffering with various diseases of the skin. The number of patients was greatly augmented by the strict physical inspections held in divisions preparing to return to the United States.

The number of venereal patients hospitalized during the month of August, 1919, was 327. The service maintained this large number of patients until the opening of the Convalescent Camp, September 23, 1919, when 149 venereal patients were transferred to this camp. Uncomplicated cases of venereal disease were evacuated to the Convalescent Camp as soon as the diagnosis was established, until April 24, 1920, after which date all cases were hospitalized for a period of 10 days prior to their transfer.

The rapid rise in the number of venereal cases admitted to the Base Hospital between the week of November 7 to 14 is due largely to the arrival of the 2d Brigade in the American Forces in Germany. Although this brigade actually joined these forces November 15 it began to unload its venereals on the Base Hospital as soon as it reached the base port en route to this station. The large venereal rate of the 2d Brigade is probably due to the massive exposure before embarkation, the disease incubating during the voyage overseas.

X-ray.—The X-ray department was taken over from Evacuation Hospital No. 27 on August 20, 1919, when that organization was merged into the Base Hospital, American Forces in Germany. The work in the laboratory before this time had been mostly emergency type, consisting in the diagnosis of bone and joint conditions and the localization of foreign bodies. Films have been used practically exclusively in the radiographic work, but plates are now being supplied and will soon take the place of the films entirely.

Laboratory.—The laboratory occupies the rooms formerly used for the same purpose by the Germans. These rooms consist of an office, serological room, pathological room, two clinico-bacteriological rooms, a room for the preparation of media, a room for sterilizing, and two stock rooms. At first the laboratory served only the evacuation hospital to which it was attached as a mobile laboratory unit. After the organization of the Base Hospital, the Third Army laboratory moved here from Trier, and did all the laboratory work for the Third Army. When the troops comprising the Third Army returned to the United States, the Third Army laboratory, as such, was discontinued, most of its personnel being returned to the United States. Sufficient personnel and equipment was retained to enable the present laboratory to carry on its functions, not only for the Base Hospital but for the entire American Forces in Germany.

Dental.—The dental clinic occupies two rooms in the dispensary building. These rooms are large, well ventilated, and have a north light, making them ideal for a dental clinic. Many improvements have been made here in order to provide for a modern dental office. Hot and cold water has been installed, connections for two fountain cuspidors have been made and extra lights placed over the operating chairs. At first portable dental equipment was installed here. As fast as base equipment was available the portable outfits were replaced, until in November, 1919, the clinic was entirely equipped with two base outfits.

In addition to the dental clinic, a dental ward was maintained until March 1, 1920, at which time it was thought advisable to place dental cases in various other wards of the hospital. Cases of Vincent's angina of the mouth were hereafter placed in the Vincent's angina section of the eye, ear, nose, and throat department; fractures of the jaws were placed in the orthopedic service; and other cases in the respective service pertaining to the nature of the disease. A large part of the work of this department has been in the treatment of Vincent's angina. The largest number of cases was admitted to the hospital during the period from September to December, 1919. A 5 per cent solution of chromic acid used twice a day has proven to be the best treatment.

All fracture cases have been of the inferior mandible. Intermaxillary wiring has been the usual procedure with very satisfactory results, all cases having recovered without complications.

Convalescent Camp.

The Convalescent Camp, American Forces in Germany, was opened on September 24, 1919. The camp was established for the treatment of convalescent venereal patients and was opened primarily to accommodate the large number of these patients under treatment at the Base Hospital, American Forces in Germany. The mission of the Convalescent Camp then was based on the principle of combining the treatment of recovering venereal patients with a schedule of military duty and instruction.

Building.—The building selected for this project was a large structure of modern architecture and construction, formerly used by the American forces as an evacuation hospital. Its location at the north end of Oberwerth Island, with its secluded position and its beautiful fronting on the Rhine River, makes it especially appropriate as a hospital. In front of the building and below the level of the road a clear strip of grassy ground running parallel with the river and extending to the water forms an especially fine drill ground for the troops.

Handling of troops.—The troops at the camp were grouped in a single unit until the middle of November. The organization was then arranged into five sections, each of which was placed under the supervision of a patient officer. These separate sections reached such proficiency in their field work that it was later decided to organize them into a unit. On December 22, therefore, a battalion was formed with subdivision into four companies. Since that date the troops have always maneuvered in one body. The battalion is marched every morning at 8.30 to its drill field on the banks of the river. The rythm and cadence is set by the camp's bugle corps of 12 bugles and 5 drums. On the drill field the companies take distance and start out with one-half hour of calisthenics. After this they have close-order drill, practice review, marching or battalion inspection depending upon the particular day's schedule. At 11 a. m. the troops are returned to the camp for a lecture on a military or medical subject. The afternoon schedule is largely field work with a lecture each day covering such subjects as military courtesy, interior guard duty, and manual of courts-martial, or a medical subject such as personal hygiene, first aid, and disease prevention. Two afternoons a week are reserved for a review of the battalion by

the commanding officer. All the men, line and staff organizations alike, are trained in the handling of the rifle and the principles of field guard duty while at the camp.

Guard.—Since the removal of the permanent guard detachment in April the camp has been guarded entirely by patients. There are nine regular posts that must be guarded by each detail. These include the main entrance and front side of the building with posts along the extent of the stockade fence which forms the inclosure at the rear of the building. One man is also posted at the prison cell. All patients take their turn at guard and come due for the detail by roster. The new guard relieves the old every afternoon in a formal guard mount conducted in the courtyard. This is held at 2.30 p. m., when the new guard is marched past the old for the usual exchange of courtesies. The instruction of the guard is handled by the adjutant while each detail functions under the officer of the day.

Professional treatment.—The patients at the camp are divided into two classes for treatment: (1) The syphilitic and chancroid cases, and (2) the gonorrheal cases. The health and physical progress of the troops are kept constantly under medical observation and the military activities of these men have been found to be consistent with their most rapid recovery to health.

Port Hospital, Antwerp, Belgium.

Before the opening of the Port Hospital, an arrangement had been effected with the Belgian military authorities by which any members of the United States Army in Antwerp, when in need of medical or surgical attention, might be taken care of at the Hospital Militaire d'Anvers. This arrangement worked very well, but had several drawbacks, among which may be mentioned the fact that any soldiers so treated were not under the control of the United States Army from the time that they were admitted to the Belgian Hospital until they were discharged. There was also always more or less difficulty about getting men discharged on time and in some cases fraudulent release occurred through the Belgians not being familiar with the United States Army procedure.

In January, 1920, word was received from G–4 either to find a suitable building for a hospital or to erect a temporary building. The only site available for the latter was distinctly unsuitable, because of its accessibility. Being located at the docks it was too noisy and dirty to be satisfactory. The search for a suitable building was continued through January and up until the middle of February, when a large property was found at 129 Longue rue d'Argile. It rented from year to year at an annual rental of 30,000 francs. This property comprised four buildings, a large stone four-story house facing the street; a smaller brick building of four stories; a large reinforced-concrete building of six stories, and a brick garage of two stories. The whole inclosed a large garden. This property before the war was an analytical chemical bureau belonging to the Compagnie Rare Metaus d'Anvers. The building had been used as a barracks for German troops during the occupation of Antwerp. It was in very bad condition and to make it suitable for a hospital it was necessary to completely remodel and refit all the buildings. The first patient was admitted April 9, 1920.

ATTENDING SURGEON'S OFFICE.

Soon after the designation of the forces in Germany as the American Forces in Germany instead of the Third Army, the office of the attending surgeon was moved to the ground floor of the Ober Post-Direktion Building, at the corner of Kaiser Wilhelm Ring and Casino Strasse, Coblenz, Germany. The work of this office consists in caring for sick of the officers stationed at Headquarters, American Forces in Germany, and their families; enlisted men on duty at headquarters and their families; members of the Interallied Rhineland High Commission; members of the British, French, and Belgium sections of the Interallied Rhineland High Commission; also welfare workers, Young Men's Christian Association, Young Women's Christian Association, Salvation Army, and lastly civilian employees of the American Forces in Germany.

ATTENDING DENTAL SURGEON.

The office of the attending dental surgeon had its inception in the spring of 1919, during the time of the Third Army. It has since the passing of the Third Army and the beginning of the American Forces in Germany been quartered in rooms requisitioned at the Ober Post-Direktion Building, corner Kaiser Wilhelm Ring and Casino Strasse, and occupies rooms 47, 48, 61, 58, and 60 of that building.

SANITATION.

During the month of August the 8th Infantry relieved the 1st and 2d Divisions in the Coblenz bridgehead area. The 2d Battalion of this regiment established headquarters at Neuweid, with two platoons of Company M quartered here in a girl's school. Company M had one platoon at Waldereitbach and one platoon at Honningen. The troops at Honningen were quartered in old barracks that had been occupied by an organization of the 1st Division; those at Walderitbach were billeted in a schoolhouse. K Company's headquarters was at Dierdorf, with one platoon at Puderbach and a platoon at Mundersbach. The company at Dierdorf was quartered in a hotel and private dwellings which were requisitioned. The platoons on outpost duty were billeted. L Company's headquarters was at Selters, with outposts at Wolferingen and Obersaynl; I Company with headquarters at Montabaur, with outposts at Hungsagen and Wallmerod. The company at Montabaur was billeted in a girl's school and those on outpost duty were billeted in private families.

In November, 1919, the 3d Battalion was relieved by the 2d Battalion of the 8th Infantry and they occupied the same stations. In February, 1920, the 2d Battalion was relieved by the 1st, the same places being taken over.

The troops in and around Coblenz, which comprised the 2d Battalion of the 8th Infantry, one battalion of the 6th Field Artillery, 7th Machine Gun Battalion, Provisional Squadron of Cavalry, 2d Pioneer Infantry, and attached troops, composed of the ordnance depot, quartermaster depot, base hospital, and convalescent camp, were quartered in barracks built by the Germans for their armies. These buildings are constructed so that one squad consisting of eight men

are quartered in a room. The floor space is amply sufficient, and is approximately 55 square feet per man. Each room is heated by a small stove. These buildings all have modern plumbing, which is connected with the main sewer system of the town of Coblenz. There are few exceptions to this rule, in which deep pit latrines were constructed by the Engineers and proved very satisfactory.

The water supplies for these towns were regularly examined. In the smaller villages it was necessary to use Lyster bags throughout the occupation. In the larger towns the water was potable.

The 2d (Silesian) Brigade, consisting of the 5th and 50th Infantry; Company D, 1st Engineers; Provisional Machine Gun Battalion; Provisional Sanitary Train; Provisional Signal Detachment; Motor Transport Corps, Units 405 and 737; Service Park Unit 540; and Light Mobile Ordnance Repair Shop 12, began arriving in this area on November 3, and the last of the units arrived by November 7, 1919.

These troops were stationed in the following towns: 1st and 2d Battalions, 5th Infantry, Andernach, one battalion being quartered in shacks and one in schools; 3d Battalion, 5th Infantry, in Plaidt, billeted; Company D, 1st Engineers, at Meisenheim, billeted; Provisional Machine Gun Battalion, Ochtendung, billeted; 1st and 2d Battalions, 50th Infantry, Mayen, billeted; 3d Battalion, 50th Infantry, Meidermendig, billeted; Sanitary Train, Mayen, billets and school buildings; Signal Detachment, Polch; Motor Transport Corps Units 405 and 737, Service Park Unit 540, and Light Mobile Ordnance Repair Shop 12, Kruft.

Prior to the arrival of these troops the water supplies in these towns were examined and found potable, except that for Neidermendig and Ochtendung, where central chlorinating dosage plants were established.

The water supply for Coblenz is obtained from deep bored wells located on Oberwert Island. It was found necessary to chlorinate the water. Wallace & Tiernan chlorinating apparatuses were installed. When the Rhine overflowed the river water seeped into the wells, contaminating it. The river flooded all the pumps, putting them out of commission. It was then necessary to establish a water point for the command. This was established by the Engineers on the banks of the Moselle. The water point was continued for three days, January 17 to January 20, 1920, by which time the river had receded and enough pumps were again put in commission to supply a limited amount of water.

The kitchens and mess halls located in the German barracks were generally used by our troops that were quartered in these buildings and were found fairly satisfactory. In the majority of them it was necessary to install ranges, as it seems that the Germans did not use them, confining themselves to large steam boilers.

Kitchen garbage is sold to German civilians and is removed by them. This manner of disposal is satisfactory, as they are very anxious to get it and remove it promptly. Manure from corrals and picket lines is also sold to the Germans.

Flies are not generally numerous; only in a few organizations have they become a nuisance. This is probably due to the cool weather, as a German more or less measures his bank account by the size of his manure piles. This is generally piled in the yard under

close surveillance and, of course, breeds many flies. In the towns they are required to remove it.

There are two bakeries for the command, one at Coblenz-Lutzel and one at Bendorf. They are excellent.

One laundry, located at Coblenz-Lutzel, is operated by the quartermaster. Soldiers are required to send their washing to this laundry. Its capacity is not sufficient for the entire command, and the command is scattered over such a large area that it is not practicable for all to patronize it. So it is necessary to have it supplemented by washing done by German women. It is probable that through this source some infections of scabies occur.

There has been a marked improvement in the general sanitary condition of the troops during the last 10 months. This is due to the increase in discipline and efficiency among officers and men. When the 8th Infantry and attached organizations took over the Coblenz bridgehead from the Third Army, the 8th had just arrived overseas and was made up largely of recruits. Since this time, August, 1919, the undesirables, both officers and men, have been eliminated and sent home. This elimination of undesirables has had the effect of keeping everyone on the alert. At the present time the remaining troops are efficient and have high morale. They are proud and generally willing to cooperate.

During November, 1919, as soon as replacements from the United States began to arrive, a replacement depot was established in Coblenz. Here all troops are held for 14 days; their service records are examined by the surgeon in charge, and if they do not show that typhoid inoculations have been completed they are revaccinated. It has been found that numbers of men are sent from the United States as replacements whose records show that their typhoid vaccinations have not been completed.

HEALTH OF THE COMMAND.

The amount of sickness among the American troops in Germany has never been excessive. Taking into consideration that these forces are made up mostly of recruits, the sick rate for communicable diseases has been very low, although some of the contagious diseases, such as diphtheria, measles, and scarlet fever, were at times above the normal prewar rate. No serious epidemics have occurred. The good health of the command can probably be explained by the mild, equable climate of the Rhine; by the good health and sanitation of the civil population; by the excellent housing conditions of the troops, most of them being in comfortable barracks; and by the careful supervision of sanitation by medical and line officers. With the exception of the control of venereal diseases, no difficult health problems have presented themselves.

INFECTIOUS DISEASES.

Measles.—This infection first made its appearance in November, 1919. A detachment of recruits, numbering some 250 men, joined the 2d Brigade November 20, 1919, coming from the United States via Brest, France. Two days later a case of measles developed in one of these soldiers. As soon as this case was reported, it was

promptly investigated and it was found that measles had occurred among these troops while in transit from New York; that they had not been placed in quarantine at Brest and that they had been assigned to organizations without first being held in the recruit camp for 14 days. All of these men were immediately quarantined, but the damage had already been done and the infection was generally scattered throughout the 2d Brigade. It is interesting to note that the majority of these 250 men were assigned to the 5th Infantry, this regiment furnishing during the following epidemic 69 cases of the total number of cases, 188.

Influenza.—This disease has always been present among members of the command, but cases did not appear in epidemic numbers until December, 1919. On the 23d of this month the 1st Battalion of the 8th Infantry reported 60 cases. This battalion, numbering approximately 1,000 men, was immediately put into strict quarantine; all drills stopped; barracks thoroughly aired and cleaned; seating capacity of mess halls reduced 50 per cent; all amusement halls closed; tables screened and the washing of dishes and utensils supervised by a commissioned officer to insure that orders requiring the boiling of kitchen utensils were being carried out. Influenza continued to appear in this battalion until the 29th of December, when it seemed that all the susceptible men had been infected. A total of 103 cases occurred in the six days; the majority were mild and only a few reminded one of the epidemic that occurred in the United States during 1918 and 1919.

The epidemic in the forces continued throughout January, February, and March. More cases occurred among troops that were quartered in barracks than in those that were billeted. This is explained by the fact that the contact incidence was considerably diminished in the troops that were billeted. The cases were generally mild in character; of the total number of cases, 68 developed pneumonia and 10 died. No epidemic occurred among the civil population. Four cases of encephalitis following influenza occurred during the epidemic.

Typhoid fever.—One case of typhoid fever occurred in a soldier belonging to the 5th Infantry. From an investigation it seems that the soldier had had three inoculations of triple typhoid vaccine while he was at Camp Taylor, Ky. It is believed that he contracted the infection while in Brest or en route between Brest and Andernach.

Scabies.—This condition is very prevalent and approximately 10 per cent of the command is infected. The bathing facilities for the command are adequate. It is believed that the commanding officers are not requiring the men to bathe twice a week, as called for by existing orders. All cases that are severe are hospitalized, and orders require that their clothing, blankets, etc., be steam sterilized.

Cerebrospinal meningitis has never been a factor, only 2 cases having occurred during the last 10 months.

Diphtheria.—This disease caused considerable apprehension during the months of October and November, 1919. In October there were 33 cases and in November 23. It was never confined to any one organization, but was scattered throughout all units. All contacts were Schicked and cultured, and carriers hospitalized until three negative cultures were obtained with two-day intervals. Susceptible individuals, as proven by the Shick test, were given serum. During

the month of December, 1919, there were at times as many as 85 carriers in the hospital. The average stay in the hospital for a carrier was 9 days. The disease is prevalent among the civil population and it is probably from this source that the troops are infected.

Mumps.—This has been present in the command at all times, but it was not until the last week of April, 1920, that the number of cases were of such a number as to give concern. The cases have been scattered throughout the command. No quarantine has been ordered, but companies in which cases occur are daily inspected. All cases are hospitalized.

Scarlet fever has been present in the command at all times, except for the months of September and October, 1919, though never at any time occurring as an epidemic. The greatest number of cases occurring in any one month was during February, 1920, when 12 cases developed.

Malarial fever.—Fourteen cases have been detected among the troops of the command. These all occurred in soldiers who gave the history of previous infection in the United States or the Tropics. There is no malaria fever among the civil population.

Tuberculosis.—This has given a low admission rate as compared with the normal rate for the entire Army before the war. The highest monthly rate (3.612) occurred in April, 1920, which is slightly above the annual rate (3.46) for the entire Army in 1916, but below the normal Army rate (4.05) for that month. The rate for the other months is considerably lower, and well below the normal Army rates.

Typhoid and paratyphoid fevers.—These entire infections are very prevalent among the civil population in and around Coblenz. Several small epidemics have been reported by the civil authorities, and as a soldier eats and drinks anywhere and everywhere it is most necessary that the inoculation of those men be completed at the earliest possible moment after their arrival in the Rhineland, if it was not fully carried out and recorded in the United States.

MEDICAL SUPPLY DEPOT.

Medical Supply Depot No. 2, Third Army, became the Medical Supply Depot, American Forces in Germany, July 2, 1919, per paragraph 1, General Orders, No. 6, Headquarters Third Army, 1919. This depot continued to function as previously, with a strength of 2 officers.

In July, 1919, it was believed that 6,500 troops would be the maximum strength of the Army maintained in Germany. In order to conserve transportation and personnel, it was decided to move the depot from its location at Metternich to the Base Hospital grounds, where several wooden buildings, barracks type, were occupied. The evacuated building was turned over to the Ordnance depot. On the departure of the personnel of Medical Supply Depot No. 2, Third Army, 4 noncommissioned officers and 10 privates were assigned to the Medical Supply Depot for duty. In a short time it was seen that the Army forces would far exceed 6,500 troops and that more space would be needed to house the medical supplies.

In November, 1919, German Pontoon Wagonhouse No. 5 (commissary compound), one of the buildings now occupied by the depot, was secured and prepared for the reception of supplies. These were

stored in the building as fast as it was made ready for their reception. On December 15, 1919, it was determined by the chief surgeon, American Forces in Germany, that the Base Hospital needed the buildings occupied by the Medical Supply Depot and that the depot would have to seek storage place elsewhere. A building located in the compound occupied by the Motor Transport Corps was secured and all the supplies stored in the wooden buildings at the Base Hospital were transferred to that building. In the latter part of February 1920, storage space for the various departments and services of the American Forces in Germany was readjusted. The Medical Supply Depot had its buildings concentrated in the German Magazin compound (now commissary compound), making it necessary again to move the supplies stored in the Motor Transport Corps building, which was a large part of the depot stock.

The depot, at present, consists of two buildings. The main building, which was a German pontoon wagonhouse, measures 50 by 150 feet, consisting of a basement and four floors ranging in height from 12 feet for the main floor to 10 feet for the top floor, which has a gable roof starting at the floor level. This gives this building approximately 37,500 square feet and 326,250 cubic feet of space. The small building, consisting of a basement and one floor, measures 41 by 90 feet, with 71,900 cubic feet of space. Of this total space, approximately 42,000 square feet and 350,000 cubic feet are available for storage.

The initial stock of supplies, approximately 700 tons, was received from Advance Medical Supply Depot No. 2, Trier, and the remainder has been received from the United States on requisitions. There are approximately 850 tons of supplies now on hand. A considerable quantity of the stock received from Trier had been turned in by organizations of the Third Army when they were ordered to the United States. Some of these supplies were therefore in a very poor and dilapidated condition. Much time and labor has been spent in going over them, cleaning and repairing some articles, reclassifying, repacking, and marking.

The depot has been very unfortunate in not being able to get sufficient and qualified personnel. None of the personnel had ever had any experience in supply work when assigned to the depot; very few had sufficient education to readily learn the duties. These difficulties, together with those necessitated by the moves made before finally becoming permanently located, at a time when we were taking inventories and checking in supplies, have made the administration of the depot a difficult matter.

MEDICAL SERVICE, AMERICAN EXPEDITIONARY FORCES, NORTH RUSSIA.

SEPTEMBER 5, 1918, TO JUNE 20, 1919.

The expedition left England, embarking at Newcastle, on August 26, 1918. It consisted of 339th Infantry, 310th Engineers, 1st Battalion, and detachment 310th Sanitary Train. The total strength of the expedition was 4,770 officers and men, under the command of Col. G. E. Stewart. The medical organizations were 337th Ambulance Company and 337th Field Hospital forming the detachment, 310th Sanitary Train, and the medical detachments, 339th Infantry and

1st Battalion, 310th Engineers. The total strength was 27 medical officers and 269 men. The troops were embarked on three transports, S. S. *Somali*, S. S. *Negoya*, and S. S. *Tideus*. The expedition arrived in Archangel on September 5, 1918.

Distribution of Medical Personnel and Hospitalization.

The problem which presented the greatest difficulty at the outset was the proper distribution of medical personnel. The front then held was approximately 400 miles in length, encircling Archangel on three sides, from Pinega on the east and Ust Padenga on the south to Onega on the west. The distance from Archangel to Pinega was 170 versts (112 miles), from Archangel to Ust Padenga was 355 versts (234 miles), and from Archangel to Onega 220 versts (145 miles). The total occupied area was approximately 15,000 square miles. The United States troops were not to be concentrated in one sector, but were to be distributed throughout the entire area. It was impossible, under these conditions, to maintain the medical organizations intact. The 27 medical officers and 269 enlisted men, Medical Department, were "pooled" and detachments varying in strength from 2 to 35 were sent to various fronts and moved as the military situations demanded. The chief surgeon established medical headquarters in the Convalescent Hospital building on Nabersnaya Street and the administration of the Medical Department personnel was centralized there. Owing to the rapidly changing military situation the detachments were often moved and their strength added to or decreased as the need arose. In some instances the personnel were placed in hospitals, dressing stations, and aid posts, and under direction of United States medical officers served the needs of both United States and allied troops. In other places the men were assigned with British, French, or Russians to administer hospitals and dressing stations. Owing to the distribution of troops, all hospitals, dressing stations, or aid posts outside of Archangel cared for sick and wounded of the allied forces, regardless of the designation of the hospital or the nationality of the officer or enlisted personnel. This arrangement was essential under the conditions existing and operated to the best interests of all concerned. However, it rendered the administration and record keeping more complicated.

Later when the Russian troops took over permanently certain forward areas, the hospitals in these areas were transferred to them also. At various points hospitals and dressing stations were established and administered by United States medical officers and personnel. In some instances buildings used as hospitals by the British were turned over upon arrival of United States medical personnel.

PINEGA SECTOR.

At Pinega, the most easterly point of the line, a hospital was established and maintained until April 8, 1919. It was then turned over to the Russian medico-military department as United States troops were then withdrawn from that sector and the sector was taken over by Russian troops.

DVINA VAGA SECTOR.

Detachment A, Field Hospital 337, established a hospital at Beresniki, and Detachment B established one at Shenkursk. In January, 1919, when Shenkursk was abandoned, Detachment B was moved to Osinovo, taking over from the British a small hospital and enlarging its capacity. After the evacuation of Shenkursk a detention hospital was taken over from the British at Ust Vaga. In this sector United States medical officers and men have been stationed at Malo Beresniki, Kitskoe, Toulgas, Kurgemin, Ust Padenga, and Chamova, maintaining aid posts, dressing stations, and infirmaries, according to the needs of the situation.

AELETSKOE SECTOR.

A British detention hospital was taken over and maintained until May, 1919.

VOLOGDA SECTOR.

Hospital facilities were provided in the railroad station at Obozerskaya, which was taken over for this purpose. In addition a very complete operating car and ambulance cars were maintained by the British. One or more United States medical officers and the required number of men have been kept on duty in this sector.

ONEGA SECTOR.

A British hospital at Onega and a dressing station at Chekuevo were maintained by British officers and personnel, but a United States medical officer, and a suitable number of enlisted men of the Medical Department, were stationed there constantly until United States troops were withdrawn from that area.

LINES OF COMMUNICATION.

On these rest houses were established at 5 to 20 mile intervals. The convoys carrying sick and wounded stopped at them over night and as opportunity offered during the day. The medical personnel was drawn from the British R. A. M. C. In some cases enlisted men, Medical Department, United States Army, accompanied the convoys. In this way the sick and wounded received necessary care and attention en route. No United States Army hospitals were maintained on the lines of communication, as the hosiptal facilities already provided by the British were adequate.

ARCHANGEL.

Here a small hospital was established at the north end of Troitsky Prospekt immediately upon arrival to meet the emergency created by the influenza epidemic. A convalescent hospital was opened shortly after. A few weeks later an excellent building formerly used as a meteorological school, adjoining the convalescent hospital was obtained through the cooperation of the American ambassador, the depot director of medical services, and the Russian authorities. It

was turned over by the Russians to the American Red Cross, who offered it to the Medical Department for use as a hospital. The Red Cross equipped it for hospital purposes, and undertook to maintain it. They furnished two female nurses, and, in addition to the medical officers supplied by the Army, offered the services of a medical officer serving with the Red Cross. This generous and timely offer was gladly accepted. With certain changes of personnel from time to time it continued in effect. Regimental infirmaries were established at Smolney Barracks, Olga Barracks, Bakharitza, and Solombola.

Delousing stations were constructed at Smolny Barracks and at the convalescent hospital. Prophylactic stations were maintained at these points.

Two dental officers were constantly on duty in Archangel, and two dental officers and one acting dental officer were available on the various fronts.

It was the opinion of the senior medical officer that the distribution of personnel and the hospital facilities provided were fully adequate to meet the needs of the situation. The character of terrain, the distance to be traversed, the primitive means of transportation and the severe and prolonged winter, made certain difficulties and hardships inherent in the situation. However, no complaints were made of failure to provide prompt and adequate medical care or attention and no cases came under observation where the condition of the patient was attributable to neglect or improper treatment.

Medical and Surgical Care.

Reference has already been made to the distribution of medical personnel and location of hospitals and dressing stations. The supply of drugs, surgical dressings, and appliances at all points proved sufficient to meet the demands. At no time was there any shortage of anaesthetics. The type of bed in use at practically all points—wooden frame with canvas top—gave satisfaction. The supply was ample. Additions to the ration by gift from the American Red Cross, by requisition of medical comforts from British stores, and by barter with the natives for eggs, game, fish, potatoes, and milk, made possible a fairly liberal and varied hospital dietary.

In some localties, Russian nurses (female) volunteered their services and were of material assistance. Except at the most advanced stations, operative work could be done under good conditions. The Carrel-Dakin technique was employed whenever possible. The most serious problems were due to shortage of personnel. At times this was relative rather than actual. Had better transportation facilities been available, the difficulties could have been minimized to a considerable extent. Even under the existing conditions the shortage was never acute, nor did sick and wounded ever suffer from delay in receiving attention. This was largely due to the unselfish spirit and devotion to duty displayed by both officers and men of the Medical Department. Had the troops been concentrated the medical personnel would have been entirely adequate. With the troops split up in small detachments, stationed at widely distant points, the question of providing medical care for all became a grave

one. This was especially so as our medical officers and men were so placed in frequent instances that in addition to the care of our own troops they were called on to serve allied troops and in some cases civilians, in localities where urgent need or localized epidemics occurred.

With the oncome of cold weather the trouble in getting supplies to the areas of all medical detachments was anticipated by establishing medical supply bases at Beresniki, Shenkursk, Obozerskaya, and Onega. In this way the convoys had considerable less distance to travel and all the fronts were well supplied.

In only one area (Seletskoe) did any complaint come to the attention of the Medical Department. This was investigated. It was found that the soldiers did not attempt to use their first-aid dressings, but expected the attention of Medical Corpsmen, which was quite impossible in all instances, since the personnel were spread over such a large area. In the case of a slight wound there was no reason why another slightly wounded man or a companion could not administer first aid.

Diseases.

INFLUENZA EPIDEMIC.

During the voyage an epidemic of influenza occurred. The first case was recognized on August 29, 1918. All possible precautions were taken, cases were isolated as far as conditions permitted, but the spread of the disease here, as elsewhere, was rapid. On arrival at Archangel there were 100 cases on S. S. *Somali*, 75 cases on S. S. *Kegoya*, but none on S. S. *Tideus*. No deaths occurred at sea. It was found that the British hospitals were able to care for only a small percentage of the cases. About 25 of the most seriously ill were transferred to the 53d Stationary Hospital. Emergency hospitals were immediately opened. Field Hospital 337 took over two Russian barracks at Bakharitza. A small hospital was opened at Smolny Barracks (Archangel), and the American Red Cross provided a building at the north end of Troitsky Prospekt which was utilized for hospital purposes. The buildings taken over at Bakharitza and Smolny Barracks were in filthy condition, and even after thorough cleaning it was necessary to scrub and spray them daily, as they were infested with vermin. These conditions were promptly dealt with, however, and in a short time beds were available for all cases. Isolation of new cases was rigidly enforced. In September, 1918, 378 cases occurred, 43 in October, and 13 in November, a total of 434. There were 63 deaths, giving a death rate of 14.5 per cent. Broncho-pneumonia was here, as elsewhere, the most frequent and serious complication. Sporadic cases of influenza were reported each month, but after November the disease did not occur in epidemic form.

The number of influenza cases for September was 378, with a mortality of 60. Nine cases of pneumonia were reported which, no doubt, were originally influenza. Complications of pneumonia were apparently more common than was shown on the report cards of the sick, for the British hospitals showed such complications only in the case of death. The chest findings of influenza cases at the convalescent hospital seemed to indicate previous pneumonia.

NERVOUS AND MENTAL DISEASES.

The total number of cases appearing in this group is relatively small. Certain conditions which existed might reasonably be assumed to favor nervous or mental breakdown. The prolonged and severe winter, the almost continuous absence of sunlight during a period of months, the isolation in small detachments, the inaccessibility of the base, the delays in mails incident to transportation conditions, infrequency of relief, prevalence of rumors, monotony of food and environment, life in a country sparsely settled at best and where in many localities the friendly inhabitants had been forced to leave through enemy activity, might all be considered predisposing factors. The type of fighting and the character of the terrain was an added element.

At no point was the fighting continuously severe, but most of the advanced positions were closely hemmed in by dense forests. The enemy activity, by patrols and raiding parties, was frequent, thus keeping the troops on a constant tension. Under these circumstances, the relatively slight incidence of nervous and mental conditions is noteworthy. The inherent stability of the men must be considered as of prime importance in the outcome, but the efforts of the company commanders to maintain morale and provide recreation, and the cooperation of the American Red Cross and Young Men's Christian Association in bringing reading matter, comforts, and recreational facilities to the troops, undoubtedly did much to maintain mental and nervous equilibrium.

DIGESTIVE DISEASES AND DISORDERS OF NUTRITION.

No outbreak of disease attributable to improper or insufficient food occurred. A small epidemic of enteritis occurred at Economie, where the 339th Infantry was concentrated prior to embarkation. In all, 148 cases were reported, but in no instance was the condition severe. All cases recovered promptly. Laboratory investigation showed the presence of dysentery (Flexner type) in some cases. The infection apparently occurred through drinking contaminated water enroute to Economie. Under the existing travel conditions it was difficult to maintain rigid supervision over all men. The disease in the great majority of cases did not resemble dysentery clinically. No cases were permitted to embark for overseas until they had been free from symptoms for one week.

RESPIRATORY DISEASES.

Bronchitis was a frequent cause for admission to hospital. The cases were not severe though somewhat protracted. Pneumonia was noted as the most important complication following influenza, but accurate statistics can not be given. Many of the cases were treated in British hospitals, where pneumonia occurring as a sequel to influenza is not recorded as such unless it causes death. Local conditions at that time rendered autopsies impossible, but clinically the condition was a broncho-pneumonia.

OTHER DISEASES.

In this group a considerable number of cases appeared under diagnosis of "arthritis," "neuritis," "myositis," conditions due directly or indirectly to cold, exposure, or dampness in all probability. In some of these exhaustion played a part, and in a certain percentage, previous infections such as influenza undoubtedly lowered resistance. These cases were neither sufficiently numerous or serious to deserve special attention and are commented on mainly because attention has been focused on the possible effects of cold in the campaign. The majority of the cases were acute, presenting rather vague symptoms of muscle or joint pains. These were often generalized and cleared up quickly without special treatment. It is possible that a certain proportion of these were malingerers. The cases of actual frost bite or freezing were too few in number to warrant especial comment.

VENEREAL DISEASES.

Venereal diseases, particularly syphilis, is prevalent in Archangel. War-time conditions and the presence of a large number of refugees in Archangel tended to increase this condition. Opportunities for recreation, exercise, and social life were few. The Red Cross, Young Men's Christian Association, and the Young Women's Christian Association did much to offset these conditions, but even so, the situation was unfavorable. The great majority of the troops were kept out of Archangel as much as possible. Company commanders and medical officers used every opportunity to warn the troops regarding the dangers of illicit sexual intercourse. American Expeditionary Forces circulars, orders, and bulletins were conspicuously posted and circulated. Prophylaxis was made easily accessible whenever possible. Men contracting venereal disease were court-martialed.

TYPHOID FEVER AND SMALLPOX.

Positive cases of typhoid and paratyphoid did not occur. However, the British laboratory diagnosed one case of typhoid and six of paratyphoid. Two cases of smallpox occurred at Beresniki, Russia; neither had had a successful "take" in last few years. All soldiers exposed in this area were vaccinated. Vaccination against cholera began the last of March.

CASUALTIES.

OCTOBER, 1918.

Gunshot wounds in September amounted to 35. On October 10, 11, and 12, on the Dvina River, a heavy engagement took place with the enemy and required a great deal of medical attention.

ATTACK AT UST PADINGA.

At Ust Padinga, January 19, 1919, the enemy opened with a heavy shell fire on our front line and continued unceasingly for three days and nights. This necessitated a great deal of work for the medical personnel. When the outposts were driven back the medical men

brought in many wounded. The shelling became so intense that the dressing station had to be moved three times. In the last location it was hit, killing three patients, severely injuring one ambulance man, and so severely wounding Lieut. Powers that he died later in Field Hospital 337, Detachment B, at Shenkursk.

After several days fighting our line retreated to Shenkursk. Many wounded were brought in and greatly overcrowded the field hospital. On the 24th it was necessary to evacuate the Shenkursk hospital (Field Hospital 337, Section B). At midnight 96 patients were transported to Shegovari, a distance of 20 versts. This was very difficult as the enemy machine guns covered the main roads and necessitated the retreat over roundabout trails through the dense woods. Excellent help was given by Lieut. Tufanoff, Medical Corps, Russian Army, who later was killed in action at Kitskoe.

Field Hospital 337, Section A, at Beresniki, could not furnish accommodations for these patients except for about 12 hours, as their capacity was only 100 beds and nearly full at the time. In the evacuation to the base but one patient died, a tuberculous case. This seems quite remarkable when it is considered how they were hurried on to Archangel, a distance of some 375 versts. The temperature was about 30 degrees below zero. The patients were crowded by continually adding more wounded to the sleds as the retreat continued. However, all were in sleeping bags and little complaint could be obtained from questioning them upon their arrival at Archangel.

During February, 1919, in the Shegovari and Kitskoe region on the Vaga River a great deal of fighting took place. The medical personnel worked night and day under heavy fire. Later new medical officers and enlisted men were required for this area. Patients were evacuated to Ust Vaga, where a dressing hospital had been established, and then sent on to Beresniki to the field hospital.

GAS WARFARE.

There were rumors that gas had been used in the Dvina River area. No cases of gas poisoning were admitted to hospitals.

TYPES OF WOUNDS.

Most of the severe wounds were of the thighs and elbows. All wounds were badly infected because of the great distances between dressing stations and hospitals. In some cases patients traveled five days with the dressings changed only by an enlisted man.

It was often noticed that many patients would have been saved weeks and months time in the base hospitals if wounds could have been freely incised and drained, even 24 hours before arrival.

FROZEN HANDS AND FEET.

Frozen hands and feet were not common, but where a retreat took place and mittens were lost or men were separated from their companies and lost in the woods for several days a few cases occurred. The Shackleton boot, with three pairs of socks, prevented frozen feet. In spring and early fall when wet they were a disagreeable footwear.

Transportation of Sick and Wounded.

METHOD OF TRANSPORTATION.

In the early fall it was possible to evacuate sick and wounded from advanced points to the base on hospital barges. This provided a relatively rapid and comfortable method of transportation from the Vaga Dvina, Pinega, and Seletskoe sectors. As navigation on the Dvina River became impossible after October 26, 1918, on account of ice, this method was no longer practicable. From then on until the river again opened in May the sick and wounded were transferred by horse-drawn sleds, carrying usually one, but sometimes two, cases each.

Many types of sleds were attempted. A large box type of sufficient size to accommodate two lying cases or four sitting cases was tried. They were about 4 feet high above the sled body. These proved top-heavy as well as too heavy for two Siberian horses to draw. In drifting snows they were absolutely useless. However, they were warm. A window in front gave sufficient light, but they were very poorly ventilated. The driver, as on all Russian sleds, was not under cover, but was seated on front of the sleigh. A smaller type of sled was tried with room for only one lying case. This allowed for no sitting cases and proved to be a failure because medical men were unable to accompany the patients. An attempt was made to employ the easy, comfortable vehicle that is used among the peasant farmers in traveling to and from town. This is the common Russian sleigh fitted with a large hood and heavy waterproof lap robe. It proved too heavy for one horse, the hood being a wind catcher. Furthermore, it was suitable only for sitting cases. The common Russian sled (called *sanni*), which not only carries passengers but also supplies, proved to be the best. There was plenty of room for two lying cases and, in addition, their equipment and a Medical Department man. They were very hard to tip over. Convoys with patients in sleeping bags traveled from three to seven days at temperatures varying from 10° to 50° F. below zero without complaints of suffering from cold, lack of food, etc.

The journey was broken by frequent stops at the rest houses or hospitals along the route. The main difficulty was the time consumed in completing the transfers. The distances of advanced points from the base ranged up to 224 miles. Convoys of sick and wounded consisted of from 15 to 50 sleds. The larger convoys were preferable, as there was less likelihood of enemy attack by small raiding parties or hostile patrols. These at times displayed considerable activity along the more exposed portions of the sled routes, notably between Beresniki and Emetskoe. The larger convoys were forced to proceed slowly, rarely averaging over 2 miles per hour. Even under the best conditions, traveling light, a single sled can not make much better than 3 or 3½ miles an hour in this locality. During the winter the daylight is limited to a few hours daily, so that much of the traveling is done in darkness. This is intensified by the heavy forest through which the trail runs for many miles. In spite of these handicaps, over 500 sick and wounded were evacuated in this way to Archangel during the winter. No serious accident occurred. Only one death en route was recorded—a case of advanced tuberculo-

sis. There was no case of frostbite, freezing, or other condition due to exposure reported. On the contrary, many cases were observed where the long journey in the open air has been of distinct benefit. Patients who were not progressing satisfactorily in hospital showed marked and rapid improvement en route. The chief surgeon, while making inspection of Dvina-Vaga front in March–April, 1919, encountered several convoys and questioned the men closely. Reports from all were to the effect that they were well fed and cared for and amply protected against cold.

Direct communication with Archangel by railroad existed at all times from the Velogda sector. Until March, 1919, the majority of casualties occurring in the Onega sector were evacuated by sled to the railroad and transferred to Archangel. This provided excellent facilities for the Velogda force. In the latter part of March Bolshiezerki was captured by the Bolsheviki and the line of communication between the Velogda and Onega forces was cut off for a short period. Until the recapture of Bolshiezerki, casualties occurring in the Onega sector were evacuated by sled to Onega and there treated in a British hospital.

TREATMENT OF WOUNDED ALONG SLED ROUTES.

Treatment along the routes was given by the enlisted men of the Medical Department accompanying the convoy. In addition at blockhouses along the main route, two ambulance men were occasionally stationed to make warm drinks, to readjust litters, and to apply warm bricks to the sleeping bags. The Young Men's Christian Association assisted considerably when the convoys arrived at their huts. Occasionally a Young Men's Christian Association man accompanied convoy to aid the enlisted attendants and to give out cigarettes and other comforts. The Russian Sisters, particularly in the evacuation of Shenkursk, rendered valuable aid and walked many miles alongside of the sleds helping to make the wounded comfortable

SLED ROUTES.

From 2 to 50 sleds form a "convoy." The customary low, light sleighs drawn by one horse make very good time. The routes are long and winding, due to the topography of the country and the dense woods. The rest houses and villages are only along these regular sleigh routes. In going north from Shenkursk, on the Vaga River, to Archangel it is necessary to go northeast a distance of 95 versts to the road from Tulgas, on the Dvina River; then for 100 versts the route is along the Dvina River to Yemetskoe; then northwest and on 22 versts to Siskoe; then west 60 versts to Kholmogorskaya. It is a very irregular road. Here the convoy was placed on the train to Bakharitza for another 60 versts to the 82d Casualty Clearing Station. They were then distributed by sled to various hospitals to Archangel, across the river, a distance of some 5 versts.

From Onega it was necessary to go 75 versts south, then east 81 versts to Chekuevo. Over another route from Kleschevo, 40 versts north from front line, sleds come to join the Onega convoy at Chekuevo. From here convoys are sent 60 versts southeast through the Obozerskaya, to an advanced clearing station. They were then placed on trains for Archangel, a distance of 80 versts.

From Pinega it is necessary for the convoys to go southwest along Pinega River 90 versts to Dvina River; then northwest 100 versts to Archangel. The map shows Pinega to be north and east of Archangel. A direct cross-country route is impossible because of the swamps and dense woods. However, by the use of many rest houses which have been established along the route, even at temperatures as low as 50° below zero, the patients come through very well.

The Seletskoe route, east of Obozerskaya 80 versts, is very rough and irregular.

General Conditions Affecting Health of Troops.

CLIMATE.

The climate of North Russia in the Archangel region is considered severe but healthy, except in the presence of epidemics. The ignorance and insanitary habits of the people, the overcrowded condition of the city of Archangel during the war, and the shortage of food were all predisposing factors, but fortunately no epidemic occurred during the stay of United States troops. The fall of 1918 was very rainy and winter set in early. By October 26 the Dvina River was no longer navigable. Accurate figures of temperature range during the winter of 1918–19 are not available, but the lowest recorded temperature of which report was made was 50° F. On several occasions as late as the last two weeks in March the temperature was 30° F. and 35° F. American troops arrived after the heat of summer was over and left before it commenced. Practically the only climatic conditions that had to be met were those incident to winter.

CLOTHING.

There was no shortage of regulation issue clothing and the men were well clad at all times. The winter equipment issued to the troops proved well adapted to the climatic conditions. The Shackelton boot was serviceable during the winter, but as the snow melted and the ground became soft it was found that this footgear afforded no protection against dampness. It was discarded early in the spring and the regulation United States field service shoe used to good advantage. The relatively insignificant number of cases of frost bite or freezing recorded furnishes ample evidence that the men were well protected from cold.

QUARTERS.

In Archangel and vicinity the men were housed in large and substantial barracks, well heated and ventilated and affording ample air space per man. On the Vologda front the men were quartered for the most part in cars. Bunks were built in freight cars; mess cars, kitchen cars, and bath cars were equipped. All were adequately heated by stoves. At Obozerskaya a large barracks building was constructed as soon as weather conditions permitted and this provided ample facilities for all needs. In the Onega, Seletskoe, Vaga-Dvina, and Pinega sectors the troops were quartered in native houses, small but substantially built of logs, and all well heated.

The Russian stove is the most conspicuous feature of practically all houses. Owing to the heavy wooded character of the country, fuel is always abundant. At the most advanced posts, the block houses and dugouts were so substantially constructed as to give the maximum protection from cold and storm. Many of the native houses taken over as quarters by the troops were infected with vermin. Owing to the type of construction it was impossible to eliminate them. The men were kept supplied with insect powder. Opportunities for bathing and change of clothing were available to men relieved from front-line duty on reaching the larger towns used as relief stations along the lines of communication. No serious difficulty was encountered in dealing with this matter. No cases of disease traceable to vermin were reported, with the exception of scabies, and these cases were not numerous.

FOOD.

The British ration for allied troops in North Russia proved inadequate for our troops. The health of the American Expeditionary Forces, North Russia, did not suffer from insufficient or improper food, but this was due to the availability of native products rather than to the adequacy of the ration. As the allied troops were serving together in small detachments in the field, it was not found practicable to eliminate mutton and rabbit from the American rations while the same components were issued to the other allies. Rabbit was issued once a week and beef was substituted for mutton whenever available.

The ration was at times defective, owing to the fact that it was difficult or impossible to split all the components into sufficiently small issues to meet the needs of the many small detachments. When issued for a company and prepared at a central kitchen it is sufficient in quantity for the needs of all, but when the company is split in six or more detachments and the uncooked ration must be divided and prepared separately, shortages are inevitable. For this reason kitchen equipment was also needed considerably in excess of the authorized scale. The Young Men's Christian Association was of material assistance, providing troops at advanced points with pies, doughnuts, and coffee. The deficiency in the ration was met substantially in three ways:

First. By making available to all troops in Archangel, or in direct communication with the base, such additional food supplies as were on hand. This met the deficiency in certain localities only.

Second. By barter of component parts of the ration for native products, which was authorized. The two articles most used for this purpose were lard and the canned Machonochie ration known as "M. and V." (meat and vegetable). Lard was issued always in excess of the amount which could be consumed as such under the conditions, and the "M. and V." ration was monotonous and little relished by the men. In return for these commodities, veal, game, fish, eggs, milk, potatoes, carrots, cabbage, rutabagas, and onions were obtained. Opportunities for barter existed at nearly all points, though native products were naturally more abundant and accessible in some localities than in others. However, practically all of the troops were enabled to make substantial additions to the ration in this way.

Third. The American Red Cross by distribution of oatmeal, canned rice, and milk, chocolate, sugar, and canned fruits made substantial and welcome additions to the ration.

By these means, coupled with the fact that troops occupying advanced points were relieved as frequently as possible, no troops were forced to live on improperly balanced or insufficient ration for a sufficient length of time to endanger health. Lime juice was available at all times and was freely and regularly used.

There was naturally considerable dissatisfaction among the men concerning the ration. Our troops were accustomed to more meat than could be issued. Mutton and rabbit were not popular. The ration, as a whole, became monotonous. The relatively large amount of tea and the correspondingly small amount of coffee available was a cause for complaint. The lack of flour, baking powder, and vegetables made variations in the preparation of the diet impossible. Dried fruits were also missed by the men. These shortages and deficiencies, however, resulted in dissatisfaction and not disease. The men were healthy and sufficiently nourished. The only instances recorded where malnutrition was conspicuous were due to insufficient teeth.

SEWAGE AND GARBAGE DISPOSAL.

Upon arrival of the troops in September, 1918, it was found that the sanitary conditions were very bad. Without exception every building taken over, and its immediate surroundings, was found in a filthy and insanitary condition. There is no sewerage system in Archangel or in any of the surrounding towns. Surface drainage is provided for by ditch drains which run under the board sidewalks. Indoor latrines led to cess pits, which were emptied at intervals. The contents are carted off to the tundra or swamp which lies immediately on the outskirts of all towns on the river bank. Due to the disorganization resultant from war conditions, the labor necessary to effect this has been lacking. The cess pits had overflowed, flush latrines had become plugged, and human excreta was conspicuous and abundant both inside and outside of the buildings.

VENTILATION.

Ventilation in many buildings was inadequate and lighting was poor. There were no bathing or delousing facilities except those afforded by privately owned Russian bathhouses. There were no incinerators, filters, or other necessary appliances in operation. There was also considerable difficulty in obtaining an adequate supply of soap and other cleaning materials.

DISEASE PREVENTION.

The situation was made worse by the influenza epidemic which had started among the troops on the way to Russia. The large number of sick required the immediate attention of the medical officers and the men. Work on the buildings and grounds was

started at once, cess pits emptied, latrines, bathhouses, incinerators, and sanitary appliances were constructed. Before winter made outdoor work impossible the situation had been greatly improved. The necessary construction, surveying, drainage, etc., was done by or under the supervision of the 310th Engineers. Russian labor and Bolshevik prisoners were utilized for some of the work, but much of the necessary policing and sanitary work was done by emergency details from the various organizations.

At the front similar conditions existed. As long as the waterways remained open and the tundra or swamp was not frozen, it was possible to accomplish a certain amount of sanitary work. With the coming of winter, however, the problem became more difficult. The deep snow and severe cold made disposal of waste and excreta difficult. At the most advanced posts, and particularly on the Vologda front (railroad), the positions consisted of small clearings, containing one or more blockhouses so near the surrounding woods that it was unsafe to carry on much work in the open. At all points, however, attempts were continuously made to maintain sanitary conditions at a good level.

The severity of the cold and the snow rendered temporarily harmless certain conditions which would have constituted a distinct menace to health at other times. This fact was recognized and preparations were made during the winter for a prompt and thorough cleaning up and installation of sanitary appliances as soon as the severity of winter moderated. Portable incinerators, fly-proof latrines, fly-proof food containers, and other sanitary appliances were constructed and held for immediate distribution when opportunity offered.

The Vaga, Dvina, and Velogda fronts were inspected during March and April and medical officers were instructed in sanitary methods and definite plans of procedure outlined. The Pinega front was turned over to the Russians at the time and American troops were withdrawn. The Onega front was inaccessible, as the capture of Bolshie Ozerki had cut the lines of communication. The number of American troops on that front was not large. A competent medical officer was stationed there and assurances were received from the British medical authorities that their sanitary personnel in that sector was adequately equipped, and would cooperate in necessary sanitary work.

Inoculation of all United States troops against cholera was started in April. Orders were issued that all water used for drinking, cooking, or washing should be chlorinated as well as boiled. Company commanders were urged to devote especial attention to inspections, police of quarters and grounds, and care of food and water supplies. As the Vaga-Dvina fronts covered a wider area, were less accessible from Archangel, and presented a greater variety of sanitary problems than the Vologda front, the sanitary inspector was temporarily stationed in this area and remained there from March 19 to May 11, supervising the sanitary work of the entire district.

Especial attention was given to sanitary conditions at the rest houses along the lines of communication. As the snow melted,

grounds and buildings were thoroughly policed and cleaned. The sanitary appliances which had been constructed during the winter were forwarded to the various fronts and installed. Commanding officers of hospitals were instructed to utilize tents as quarters for enlisted personnel as weather conditions permitted. This was done to some extent in Archangel, but the early return of the United States troops from the fronts rendered this precaution unnecessary.

By the middle of April the withdrawal of United States troops from the various fronts was commenced, and by May 1 the assembling of the 339th Infantry, at Economie, an island 15 miles from Archangel, was well under way. Permanent buildings and tents were available at Economie. A bathhouse and suitable bucket latrines were already constructed, as this island had been used by the British as a camp through the winter. A filtration plant was in operation, but as its capacity was not sufficient to supply estimated needs, an additional one was constructed by the 310th Engineers. A regimental infirmary was opened. A small British hospital already located there was made available for our use in case of need. During the epidemic of enteritis already referred to, this hospital was used, as the cases were too acute and of too short duration to warrant their removal to Archangel. During May all units of the 339th Infantry were assembled, deloused, inspected, and reequipped at Economie. By June 15 all of the 339th Infantry had embarked, and that portion of the camp which had been occupied by our troops was returned to the British.

DELOUSING PLANTS.

Beside the small delousing plant at the convalescent hospital, a much larger one was constructed at Smolny Barracks, which consisted of an undressing room, large shower baths, a Thresh sterilizer, a Russian sterilizer, and a dressing room. About 100 men could be deloused in a day. These plants were comparatively small, but sufficiently large for this expedition, as only a few troops were present at the base at any one time. The small plants at the front reduced the number of infested to 50 per cent, so that when troops reached the base all men did not have to be deloused. As there were no cases of typhus among our troops, it was not deemed necessary to delouse the entire company.

RUSSIAN DOCTORS AND SISTERS.

Russian physicians have been of great assistance, especially where United States troops were associated with Russian troops. The felchers (2-year medical students) were in the majority. They were, however, able to give a great deal of assistance to our medical officers. The Sisters who served at Shenkursk, Beresniki, Pinega, and Obozerskaya did some very good work. They have been nursing in Russia for most of the time during the war. Their greatest assistance was rendered in dealing with civilians.

Evacuation to England.

EVACUATION OF SICK AND WOUNDED.

A total of 527 cases have been returned to England for further observation and treatment or for permanent disability. Of these 325 were evacuated on H. M. H. S. *Kalyan* on June 3, 1919. A medical officer accompanied each group of patients. The large number in the last evacuation was partly due to the fact that cases had accumulated during the winter months when transportation was not available and partly owing to request made by commanding officer, 339th Infantry, that no cases unable to perform full duty be returned to their organization. There were a relatively large number of such cases at the time H. M. H. S. *Kalyan* was due to sail. The date of sailing had not been set for the 339th Infantry but was believed to be closely following departure of the hospital ship. For this reason a larger number of men were evacuated to England as sick in hospital than would ordinarily have been the case. Many of these cases were convalescing and would have been available for duty in a short time. Only 8 of the 323 were classed as "lying" cases, the remainder were "walking." The uncertainties of departures, the fact that nothing was known at that time concerning the facilities for caring for partially disabled men on the transports, and the possibility of emergency demands being made en route, rendered it desirable to give the men the benefit of the ample space and excellent care offered by the hospital ship, rather than to take any chances of delaying their recovery.

EVACUATION OF TROOPS.

The first detachment of troops, totaling 1,668, left from Economie on S. S. *Czar*, June 3, 1919. On June 15 the S. S. *Menomina* and S. S. *Porto* sailed, carrying, respectively, 853 and 1,360 men, representing balance of the 339th Infantry and 310th Sanitary Train Detachment.

All soldiers were deloused and reequipped upon arrival from the fronts. Prior to embarkation they were inspected for venereal disease, contagious disease, scabies, and lice. Ships were rigidly inspected before troops were allowed to embark. Sanitary conditions were good except for the water supply. It was found that in each case most of the ship's tanks had been refilled for the return voyage with untreated Dvina River water, which is known to be badly contaminated. All water on board was accordingly chlorinated before troops embarked. All troops had previously been inoculated against cholera (Apr.–May, 1919). In addition, arrangements were made to boil or distill as much of the drinking water as possible. The men's quarters were comfortable, clean, and with sufficient air space. Kitchen arrangements were excellent. Hospital facilities for care of men taken sick en route were adequate.

Miscellaneous.

RECORDS.

Most of the paper work for every detachment had to be made out in the chief surgeon's office. The proper records could be obtained only by combining the records from the British base records office with the American reports. Patients traveled through so many hospitals that it was impossible to get the proper data for the Surgeon General's Office from the field medical cards, Forms 52, and diagnosis tags. The officers and men were spread out into so many small detachments that it was necessary for the chief surgeon to be the acting commander of each organization, and to look after the individual reports, service records, allotments, etc. There was no personnel officer. It was necessary to send or attach a clerk from this office to the British base hospitals to obtain data for records. The greatest difficulty was in collecting data on the report for the sick and wounded. At least 90 days elapsed before reports were received. Then, 4 to 6 weeks were necessary for courier to take the cards to London. This made the reports about 4 months late. The monthly reports of diseases show only admissions in Archangel and vicinity. It was impossible to obtain reports from field hospitals and detention hospitals in time to include them. However, report cards will eventually show every case.

DAKIN'S SOLUTION.

This was used at the front wherever possible. Men in medical detachments, field hospitals, and ambulance companies were trained in our infirmaries to make this solution. With the kind assistance of the French chemists, who always accompanied their troops and made the Dakin's, we were certain of obtaining a proper solution.

SUMMARY.

It is believed that the experience gained in this campaign indicates that under similar conditions a larger number of officers and enlisted men of the Medical Department, a more extensive kitchen equipment, and a larger supply of emergency rations would be advisable. The efforts which were made by all concerned to overcome the handicaps and supply the needs met with success, but the margin of safety was small. Difficulties have arisen through the necessity of splitting our forces into small and widely separated detachments over a large area in a country where the character of the terrain and facilities for transportation rendered communication difficult at all times and occasionally impossible. No actual suffering occurred, but it has been a hard test of the stamina and morale of the men. The addition of special sanitary squads, a larger number of officer or noncommissioned personnel trained in sanitary work, and excess cooking and sanitary appliances, such as field ranges, rolling kitchens of the Sternberg type, water carts (British Army type, which provides for filtration, coagulation, and chlorination), boilers, kitchen utensils, small meat grinders, and marmite cans, should be considered.

SUMMARY OF HOSPITAL FACILITIES.

Location of United States Army Medical Department hospitals, dressing stations, and aid stations given below and indicated on accompanying map.

Designation.	Location.	Opened.	Closed.	Bed capacity.
Field Hospital 337	Bakharitza	Sept. 6, 1918	Oct. 6, 1918	250
Infirmary, 2d Battalion	Archangel	....do....	Nov. 21, 1918	40
American Red Cross (annex)	....do....	Sept. 7, 1918	June 3, 1919	30
American Red Cross hospital	....do....	Sept. 10, 1918	June 20, 1919	85
Detention hospital	Seletskoe	Sept. —, 1918	May 26, 1919	80
Field Hospital 337, Detachment A	Beresniki	Sept. 25, 1918	June 10, 1919	100
Detention hospital	Obozerskaya	Sept. 29, 1918	Dec. 1, 1918	25
Convalescent hospital	Archangel	Oct. 8, 1918	June 13, 1919	225
Field Hospital 337, Detachment B	Shenkursk	Oct. 19, 1918	Jan. 25, 1919	100
Detention hospital	Shegovari	Nov. 9, 1918	Jan. 26, 1919	10
Do	Pinega	Dec. 6, 1918	Apr. 8, 1919	200
Do	Ust Vaga	Jan. 29, 1918	June 11, 1919	20
Field hospital, Detachment B	Osmovo	Mar. 25, 1919	May 31, 1919	60
Field hospital, Detachment C	Morjegerskaya	Apr. 17, 1919	May 10, 1919	20
Hospital barge 335	Toulgas	May 9, 1919	June 13, 1919	40
Aid station	Ust Padinga	(1)	(1)	10
Do	Malo Beresniki	(1)	(1)	10
Do	Chinovo	(1)	(1)	10
Do	Kurgomin	(1)	(1)	10
Do	Chamovo	(1)	(1)	10
Do	Kitsa	(1)	(1)	10
Do	Verst 435	(1)	(1)	10
Total bed capacity				1,375

[1] Dates not given, as these stations were occupied alternately by United States Army and British medical personnel.

Number of hospitals, dressing stations, and aid stations maintained by United States Army Medical Department, Sept. 5, 1918, to June 20, 1919	22
Number maintained by British Army medical service	26
Total bed capacity, United States Army	1,375
Total bed capacity, British	2,756

NOTE.—(1) Bed capacity is approximate, as emergency capacity varied widely in different localities; (2) hospitals were often maintained alternately by United States Army and British medical personnel, and above figures represent as closely as possible hospitals, etc., under distinctive control of each Government; (3) 756 British beds were on H. M. H. S. Kalyan, which was used as a hospital while frozen in ice during winter, but left for England June 3, 1919.

STATISTICAL SUMMARY OF CASUALTIES.

Total admission to hospital (all causes)		2,352
Total discharged to duty		1,706
Transferred to other hospitals		12
Evacuated to England		527
Remaining June 20, 1919		3
Died		104
Total		2,352
Total casualties not admitted to hospital:		
Killed in action	82	
Accidentally killed	5	
Suicide	1	
		88
Total missing:		
No information	36	
Heard from as prisoners	3	
Later released by enemy	4	
Later reported dead	2	
		45
Total casualties		2,485

Total deaths:	
Killed in action	82
Accidentally killed	7
Suicide	1
Died of wounds	30
Died of disease	72
Cause of deaths from disease:	
Lobar pneumonia [1]	36
Broncho-pneumonia [1]	32
Enteritis, chronic, variety undetermined	1
Tuberculosis, chronic, pulmonary	1
Tuberculosis (psoas abscess)	1
Meningitis	1
	72

MEDICAL DEPARTMENT, EXPEDITIONARY FORCES TO SIBERIA.

The medical history of the expedition to Siberia of the American Forces presents practically no interesting features whatever along the lines of sanitary service in combat. It resembles very much the expeditions that have been conducted by American troops on entering Cuba, Phillipines and China.

The operations of the command in the year 1918 were confined almost exclusively to eastern Siberia, extending to the northeast along the Ussuri and Amur Railroads as far west as Ushuman, about 1,100 miles from Vladivostok, and also to the west as far as Harbin, along the Chinese Eastern Railroad. In 1919 and 1920, the operations reached to Spasskee, Razdolnoe, Shketovo, Souchian, and Verhkne-Udinsk-Beresovka sectors.

Vladivostok, the principal Pacific seaport, was established in 1869. The inhabitants are largely the workmen and peasant class of Russians, with a considerable number of Chinese, Koreans, and Japanese. The population is variously estimated at between two and four hundred thousand. As is well known, Siberia was the depository for many years of the criminal classes of Russia, and it was not until 1900 that imprisonment was substituted for exile in that country. It is readily seen, with such a population as exists in Siberia, with its recent refugees, with ignorance of the simplest sanitary laws by the mixed population, and with a total lack of municipal or general government to carry out the law, just what the sanitary problem amounted to with the Expeditionary Forces during its occupation.

Climate and Temperature.

After a winter in Siberia it might be said that the terror popularly supposed to exist of a Siberian winter is not based on fact, but rather on the experiencies of the poorly fed, poorly housed, and insufficiently clothed natives. The climate of Vladivostok is relatively mild for a cold country, and the troops even at Habarovsk, Harbin, and Beresovka, where the temperature gets very low, suffered but little from the cold, as they were suitably housed, clothed, and fed. In most parts of Siberia the rainfall is light and the snowfall is comparatively slight. Only where it drifts does the snow become deep enough to be troublesome. Although the low temperature of

[1] Both occurring in nearly all cases as complication of influenza.

Siberia is benumbing, its evil effects are less than might be expected, because of the usual absence of wind during the coldest months except on the coast, as at Vladivostok, where high winds are frequent. At that season, fortunately, the air is so still in most parts of Siberia that one does not realize how extremely cold it is. The uninitiated are often frost bitten severely without becoming conscious of their danger. The so-called "burans," or snowstorms, are often of terrible severity. In the spring they often destroy thousands of horses and cattle that have lived comfortably through the long winter. They also cause the snow to drift heavily.

Transportation.

Transportation by rail in Siberia is principally by the Siberian Railroad and its branches. This great railroad was commenced in 1891. The engines are small and slow, the freight cars small, and the passenger cars of the continental type with the usual three classes, compartments holding from two to four persons. The condition of the roadbed is very poor, owing to the lack of funds as a result of the chaotic state of the government.

The topographical and weather conditions of some parts of Siberia limits somewhat the use of ordinary motor cars to the season from about the middle of May to the middle of November. During the favorable parts of the year all sorts of motor transport, including heavy trucks, can be used on the ordinary dirt roads throughout Siberia. The chief difficulty in the use of motor cars arises from the mud, the frozen ruts, and the snow. These make motor traffic difficult during a portion of the year. Nevertheless, motor cars that are sufficiently light and powerful and which have broad wheels for use in mud, or over rough frozen ground and snow, would be useful during practically the entire year. Another difficulty met with in winter with automobiles is that the extreme cold freezes the cooling mixture in the radiators. This results frequently in the destruction of the engine. Air-cooled engines and an abundance of spare parts are desirable. The latter were badly needed for the motor ambulances with the expedition.

Civil Population of Siberia.

Sanitation.

A general description of sanitation in Siberia is most readily expressed by the statement that practically none exists. Sanitary conditions in the rural districts are much the same as those seen in China, which are apparently the same as those existing before the time of the Christian era. Literally thousands of inhabitants are living in the freight and passenger cars as they lay in the railroad yards throughout Siberia. These people have no way of disposing of their night soil. The yards surrounding each station are covered with human excrement, as no effort has been made in the past to remove it but once a year, in the spring.

Water.—Water for all purposes is obtained almost invariably from surface wells or streams, and is usually poluted at its source

or in its delivery to the population in filthy carts by Chinese coolies. Typhoid and other diseases transmitted by drinking water are endemic. Owing to the unusual prevalence of tea drinking by the populace throughout Siberia the incidence of these diseases is very much reduced.

Disposal of wastes.—Garbage is disposed of by throwing it on the ground in the immediate vicinity of habitations or by feeding it to the domestic animals; night soil by depositing it in shallow pits or boxes from which it is carted off by Chinese coolies. A very few houses have antiquated "water carriage" systems.

Housing.—Habitations, except those of the rich, are overcrowded, poorly ventilated, and filthy.

Clothing.—Clothing of the better classes is suitable. Most of the pictures drawn of the suffering from the intense cold in Siberia are incident to the improperly clothed, poverty-stricken peasants now so numerous since the advent of the World War.

Prevalent diseases.—Infant mortality, as can be easily imagined, is very great. The usual diseases of the North Temperate and South Arctic Zones are met with. Due to the insanitary conditions, communicable diseases are very prevalent. The principal ones are smallpox, plague, typhus, relapsing fever, typhoid fever, scarlet fever, and a malignant sore throat. The type of scarlet fever is a most malignant and fulminating one, as is also a peculiar and malignant form of sore throat. Both diseases are usually fatal.

Venereal diseases.—The number of cases per 1,000 of the population is enormous. No accurate data from reliable sources could be obtained owing to the disorganization of the Government, and one hesitates to state the proportion reported infected from what is supposed to be authentic sources.

Organization of the Expedition.

On August 6, 1918, orders were issued by the commanding general of the Department of the Philippines, in compliance with cabled instructions from Washington, directing that certain experienced staff officers be selected and sent to Vladivostok, Siberia, by the first available transportation, to report for duty to the commanding general of the American troops at that point. Immediately following these instructions, and originating from the same source, orders were issued directing the Twenty-seventh Infantry, and the Thirty-first Infantry with their sanitary personnel, Ambulance Company No. 4, Field Hospital No. 4, detachments of Engineers, Signal, Ordnance, and Quartermaster Corps, to embark without delay for Vladivostok for duty in Siberia. These organizations were at that time organized under the Tables of August, 1917. They were subsequently raised to strength authorized under Tables of August, 1918, by personnel sent from the United States. The personnel forming the expedition was about equally divided in its source between the United States and the Philippine Islands. Any remarks, as to the origin of the expedition, made will be directed with this fact in view.

Area Occupied.

VLADIVOSTOK.

Arrival.—The expedition landed at Vladivostok at about 12 o'clock noon, August 15, and was assigned to Russian barracks.

Housing.—The condition of the barracks was unspeakable. The floors were covered with excrement and filth and infested with vermin. There was no proper provision for the disposal of night soil, nor was there running water, sewerage system, or any provision for artificial light. All the barracks around Valdivostok conform to a general plan and are about 240 feet long, 45 feet wide, of brick construction trimmed with stone. They are usually one story high, but some are of two-story construction. These barrack buildings and those observed throughout eastern Siberia were built for Russian troops. Waste water and garbage were disposed of by throwing them through a hole in the floor. There was no provision for a mess hall. The squad rooms were lighted by the conventional double windows, sufficient in number. The heating of all buildings was accomplished by large brick or cast-iron stoves lined with fire brick. These stoves are about 4 feet square and 10 feet high. The firebox is small, and some hours of firing are required to obtain the heat required. They are insufficient for heating a room with the amount of ventilation required for health.

Water.—For our command in Vladivostok the drinking water used was furnished by distilling plants installed by the quartermaster department. There was one at the "Base" in Vladivostok and one at the evacuation hospital.

Wastes.—The excrement from the organization was deposited in large concrete vaults beneath the building, from which it was removed by Chinese coolie scavengers.

NORTHERN ADVANCE OF THE EXPEDITION.

Shortly after the arrival of the troops at Vladivostok information was received that the Bolsheviki were in force along the Ussuri road. The commanding officer of the expedition directed that the 27th Infantry (approximately 3,500 officers and men) proceed north along the Ussuri road toward Habarovsk to assist the Japanese, Czechs, and French, who were operating along that front under the command of a Japanese general.

Evacuation of the sick.—Coincidently with the departure of these troops from Vladivostok on August 25, it became necessary to provide for the evacuation of the sick and possible wounded to the base established at Vladivostok. This was a very serious question owing to the scarcity of railroad transportation, the distance being too great and the roads too poor to consider any other method. After considerable trouble with the local authorities five small freight cars were obtained. These cars were fitted up with "standee" bunks from the transport *Warren*, Sibley stoves, and bedding. The medical and surgical equipment and the personnel were obtained from the regimental hospital of the 27th Infantry. The cars were sent forward complete in about 19 hours. They were satisfactory and gave

excellent service until they were abandoned in November for another type of car, as the weather had become too cold to operate them. This latter car was a complete unit in itself, with a kitchen. The central compartments were removed and the space converted into a 12-bed ward, using "standee" bunks and pads of the type provided for the gold medal cots in evacuation hospitals. This arrangement was much more satisfactory than the berths originally installed in the compartments, as it permitted a proper cleaning of the car. This was especially necessary if it became infested with vermin. The bunks were very comfortable. This arrangement also allowed better heating and ventilation.

Habarovsk.—Habarovsk was reached at 7 o'clock on the morning of September 17, 1916. The town is on the Amur River, has something less than 60,000 inhabitants, and is 480 miles north of Vladivostok. It is a typical Siberian town of the better class and possesses unusual transportation facilities, being located not only on the river, which is freely navigable at this point, but also at the junction of the Ussuri & Habarovsk Kerimskaya Railroads. At the latter town this branch joins the trunk line of the Trans-Siberian road. This town is also of interest, as it was the objective of the troops in the northern advance. Later in the winter of 1918–19, when it was held by the 27th Infantry, it served as an advanced base.

The military hospital at Habarovsk, with personnel of Field Hospital No. 4, one-half of personnel of Ambulance Company No. 4, and detachment Medical Department, 27th Infantry, was opened November 11, 1918. It continued in operation until the departure of the troops to Spasskoe on June 20, 1919, when the material, personnel, and patients were transferred to Spasskoe Military Hospital. Field Hospital No. 4 had left in March for Verhkne-Udinsk with the 27th Infantry, less six companies.

The military hospital unfortunately had cramped accommodations. The available space was insufficient for the necessary 100 beds and the several special departments. The buildings were in a deplorable condition when taken over. Much repair work and interior renovation was necessary. The main hospital building was piped for water. A small drain connecting with a cesspool was constructed by our troops with the aid of Russian laborers. The hospital proper occupied four separate buildings somewhat apart from each other, the main building being of brick, two stories in height with space for 100 beds. It was unable to accommodate all the sick of the regiment, and a large number were compelled to remain in quarters.

Patients with epidemic diseases were isolated and treated in a large building in camp some distance from the main hospital building. This building was of two stories, the lower story being designated as an isolation and convalescent hospital by the commanding officer 27th Infantry. It was quite well adapted for the purpose.

A prison hospital of 100 beds was established November 8 at Krasnaya Retchka, 13 miles from Habarovsk, where one company of the 27th Infanty was stationed as guard over German war prisoners numbering 1,300 officers and 550 enlisted men.

Verhkne-Udinsk (Beresovka).—During the months of April and May, 1919, the 27th Infantry, less six companies, was transferred to a sector of the Trans-Siberian Railroad extending from Verhkne-

Udinsk, 1,700 miles west of Vladivostok via the Chinese Eastern Extension, to Mysovia, 100 miles west of Verhkne-Udinsk, on the shore of Lake Baikal. One company was stationed at Mysovia, another at several intermediate stations, while other troops remained in a beautifully located and sanitary camp at Verhkne-Udinsk until October, when log barracks were occupied at Beresovka, 6 miles west of Verhkne-Udinsk. Field Hospital No. 4, occupying floored and framed tents, provided hospital accommodations while in camp; it was later established at Beresovka in barrack buildings which were thoroughly cleaned, refloored, and whitewashed before occupancy.

During the summer months about 75 American Red Cross nurses were "stranded" in Verhkne-Udinsk in consequence of the tottering condition of the Kolchak government. The volunteer services of some of the nurses was accepted in the hospital, comfortable tents and messing accommodations having been provided by the commanding officer. During the period from November 15 to January 15, 1920, the services of 12 of these nurses who were still remaining in Verhkne-Udinsk were requested by the commanding officer of the 27th Infantry to assist in the care of patients suffering from influenza. This disease had become epidemic among the young and poorly developed replacement troops. These nurses rendered invaluable services while on duty. Quarters were furnished and meals provided in the officers' mess. The cost of subsistence was refunded the officers' mess by the American Red Cross with the understanding that the expense of subsistence would be paid to the American Red Cross in Washington.

The command on the Beresovka sector was withdrawn early in January, 1920. The first section, which evacuated the sick, left January 18 and the others at varying intervals. The last section arrived in Vladivostok February 10, 1920.

Spasskoe sector.—During the month of November, 1918, a military hospital of 50 beds was opened at Spasskoe, which station became headquarters of the sector extending from there to Ussuri, 68 miles north, with five substations. This sector, at first garrisoned by the 31st Infantry, was later taken over by two companies of the 27th Infantry. During May and June, 1919, the command was reinforced by the arrival of four additional companies of the 27th Infantry from Nabarovsk. The hospital was increased to 100 beds on June 20, 1919. It provided comfortable accommodations for the entire sector. The strength of command from June 20, 1919, to January, 1920, was approximately 1,500. Occasional encounters with small bands of partizans, which also attacked passenger trains, in June taxed the hospital accommodations and personnel to the extreme. Nothing more of especial interest occurred in this sector except the influenza epidemic among the young and poorly developed replacement troops in November and December, 1919. This hospital was closed January 9, 1920, when troops left for Vladivostok, sailing for Manila January 17, 1920.

31st Infantry sectors.—The 31st Infantry was stationed in Vladivostok, on the "Vladivostok Razdolnoe" sector and the "Ugolnaya Shkotovo and Souchian Mines" sectors, a distance of 66 miles. There was also a detachment of about 200 men at Harbin from October, 1918, until July 4, 1919, on which date this detachment returned to Vladivostok. A 12-bed hospital was used at this station. An

infirmary was opened at Ugolnaya in May, 1919, and closed October 6, 1919.

A hospital was opened at Razdolnoe in November, 1918, and closed March 7, 1920, when the troops returned to Vladostok preparatory to embarkation for Manila.

The Souchian Mines Hospital was opened September 11, 1918, and was closed August 19, 1919, when the command was transferred to Vladivostok. Frequent attacks were made by partizans upon the troops, who made occasional punitive expeditions into the surrounding country during June and July, suffering only a few casualties. All of the wounded were treated at Evacuation Hospital No. 17.

The hospital at Shkotovo was opened on April 23, 1919, and was closed January 12, 1920, when troops left for Vladivostok en route to Manila. This was a 40-bed hospital and cared for the patients from four substations.

On June 25 the 70 men stationed at Romanovka were surprised at daylight by an attack from a large force of partizans. We suffered a loss of 19 killed and 26 wounded. The hospital train had been sent up the day before to distribute supplies and to be held in readiness for evacuation of sick and wounded. On notification of the attack while it was at Kangauz, 20 miles distant, it was hurried to Romanovka, arriving there while the attack was still in progress. It began caring for the wounded before the cessation of the firing by the surrounding enemy. The wounded arrived safely in Vladivostok at 7 p. m. the same day, after having been transferred across a river to flat cars by means of a footbridge constructed of partly burned timbers.

Hospital Accommodations.

In so far as beds are concerned, hospital facilities have been generally sufficient, but the difficulties attendant on lack of water, inconvenient lavatories, and absence of bathing facilities have added to the obviously unsatisfactory conditious imposed by the necessity of improvising hospitals from barrack buildings.

Sanitation.

On account of the exigencies of the service, requiring numerous small detachment stations on railroad guard duty, sanitation has not been ideal. Proper bathing and delousing facilities have been practicable only at larger stations. The smaller commands were required to resort to the use of the Serbian barrel. Disinfectors were provided at the main stations. Baths have necessarily been limited. A train equipped with delousing and bathing facilities is a necessity for proper sanitation under such circumstances. The method of disposal of wastes necessitated by lack of sewerage in city stations and widely scattered railroad guard detachments (especially with recruit personnel) leaves much to be desired. Cesspools beneath buildings, and pit latrines, with imperfect incineration of the garbage that was not removed by natives, were the only practicable measures.

Sanitary Personnel.

From the date of departure of the 27th Infantry in August, 1918, on the expedition to Habarovsk, the commissioned and enlisted sanitary personnel were insufficient in number and received little instruction and training. As the stations and substations were established along the railroad for a total distance of more than 300 miles, which our forces guarded practically throughout the entire time spent in Siberia, the problem of providing proper medical attendance was always a difficult one to solve. Records and returns were frequently neglected, or so imperfectly prepared as to necessitate repeated return for correction. Rail and wire communications were interfered with. Communication, especially with Verhkne-Udinsk, 1,700 miles distant, were most unsatisfactory.

The shortage of officers and trained enlisted personnel occasioned by the return of many to the United States for discharge caused embarrassment in care of sick and made it advisable to transfer to the United States such cases as hernias and other operable defects which existed prior to enlistment. The acceptance of many morons and border-line unstable mentality cases, in addition to the many physically unfit, proved a serious handicap to the work of the Medical Department. Many recruits were returned without having rendered any service to the Government. The sweeping replacement of trained enlisted personnel by recruits in the fall of 1919 had its obvious results. The average strength of sanitary personnel on duty with this command was: Commissioned Medical Corps, 44; Dental Corps, 10; Sanitary Corps, 3; Veterinary Corps, 3; nurses, 18; Medical Department enlisted men, 640.

Mobile Sanitary Units.

MEDICAL SUPPLY DEPOT NO. 7.

The medical supply officer rendered excellent service. Supplies were sufficient and satisfactory with the one exception of biological products, the valency period for which was so brief at the time of their receipt, especially in the case of smallpox vaccine, as to necessitate frequent requisitions by cable. The Medical Department laundry was satisfactorily done for evacuation hospitals at Shkotovo and Spasskoe, and Razdolnoe Hospital at the base, by Chinese laborers at a low rate.

HOSPITAL TRAIN.

The distance from Vladivostok to Spasskoe (150 miles) and the dangers incident to railroad transportation, frequent attacks on trains, and destruction of bridges and telegraph lines interferred often with operation of the hospital train. The regular dispatch of this train was discontinued after the evacuation of the patients in Habarovsk Hospital to Spasskoe in June. During this trip, en route from Vladivostok to Spasskoe, the train to which the hospital cars were attached was attacked on June 12 at Knorring Siding, 14 miles from Spasskoe. Several rifle bullets passed through all the cars of the train, killing and wounding several passengers. The hospital train proceeded to Habarovsk and evacuated patients from that hospital, as well as the wounded that had been sent to Ussuri from the troops operating near Uspankato to the hospital at Spasskoe.

The trip to Habarovsk and return to Spasskoe was made possible by the exercise of commendable ingenuity and courage on the part of the medical officer commanding the special train and the members of the train guard, two of whom volunteered to operate the locomotive, which was successfully done over a division. The crew had been removed by the railroad authorities and right of way refused because of the uncertain conditions of the road. The telegraph lines had been destroyed by the partisans operating against the troops guarding the road.

FIELD HOSPITAL NO. 4.

Field Hospital No. 4 arrived September 14, 1918, with a strength of 5 officers and 70 enlisted men. This personnel remained with the company both at Habarovsk and at Verhkne-Udinsk-Beresovka. The organization sailed for Manila March 30, 1920.

AMBULANCE COMPANY NO. 4.

Ambulance Company No. 4 arrived September 14, 1918. This company had a personnel of 1 officer and 130 enlisted men. One-half of the enlisted personnel was detached for service with troops guarding the railroad in the Spasskoe, Razdolnoe, and Shkotov sectors. One-half of this number was on duty at the Habarovsk Hospital from November, 1918, to June, 1919.

EVACUATION HOSPITAL NO. 17.

The initial steps in the organization of this hospital were taken pursuant to instructions issued by a letter from the Surgeon General's Office to headquarters Fort Riley, Kans., March 4, 1918. On June 17, 1918, a telegram from the Surgeon General's Office transferred Evacuation Hospital No. 17 from Fort Riley to Fort Sam Houston, Tex., to complete its mobilization at that place. On August 2, 1918, it was ordered to Hoboken, N. J., en route to France. This order was revoked and the organization was sent to San Francisco, Calif., en route to Vladivostok, Siberia.

Transportation to Siberia was furnished on the United States Army transport *Logan*, which sailed from San Francisco September 2, 1918. On board the *Logan* were 1,500 infantrymen en route to Siberia. It was on this ship that the personnel of the hospital did its first real service. This consisted of caring for patients suffering from attacks of tonsillitis, which appeared in epidemic form. The *Logan* arrived at Hakodate, Japan, September 21, 1918.

The first night in the Siberian port was spent aboard ship. The next morning the men marched to Ulysses Bay, where they were to establish the hospital in barracks owned by the Russians. The first three weeks' stay at Ulysses Bay was spent in pulling weeds and in cleaning up the barracks, which were well-constructed brick buildings, furnished throughout with the Russian type stoves, double doors, and double windows. On November 4, 1918, the personnel of the hospital was augmented by the arrival of 9 medical officers and 27 nurses who arrived on the transport *Sherman*. The nurses had originally been ordered to San Francisco as part of Base Hospital 93

Unit. The site of the hospital at Ulysses Bay is on a peninsula, connected to the mainland by a narrow neck of land, to the west of which is Ulysses Bay, and to the east Petrocolus Bay. The peninsula consists of one large "hill," on the northern side of which is located practically all the buildings used by the hospital. The buildings are widely separated, it being about 1 mile from the surgical ward to the nurses' home. The hospital proper, together with headquarters and nurses' home, occupied about 10 buildings. Some of the greatest difficulties encountered in the establishment of a modern hospital was the fact that there is no water-supply or sewerage system. Water for use in all wards and for all purposes had to be hauled a considerable distance in water carts. There was no electric power except for lighting the operating room and for use in running a small X-ray outfit. This power was furnished by a small "Delco system." In the wards and other buildings oil lamps were used.

The officers who were originally with the hospital were relieved by an equal number of officers sent from the States the latter part of March, 1919.

Only once was the hospital called upon to care for battle casualties, and this was on June 25, 1919, after an attack upon an American detachment of 62 men by the Bolsheviks. Forty-five were brought to the hospital, 20 dead and 25 wounded.

In addition to caring for the soldiers of the American Expeditionary Forces, this hospital treated the sick from a German prison camp under American control, and containing approximately 500 prisoners; a large number of civilians, Young Men's Christian Association, Knights of Columbus, Russian railway engineer service corps; and also from the United States battleships stationed at Vladivostok. A total of 14 deaths occurred in the hospital.

In the early part of January, 1920, it was learned that the Expeditionary Forces were to be transferred to Manila. In accordance with orders from American headquarters, American Expeditionary Forces, Siberia, the first transfer of patients was made to the U. S. A. T. *Great Northern*, which sailed from Vladivostok on January 16, 1920, with 310 patients. The next transfer of patients was made to the U. S. A. T. *Crook*, which sailed on February 14, 1920, with 105 patients. Again, on March 9, 1920, the U. S. A. T. *Thomas* took 100 more patients.

The total number of patients treated by Evacuation Hospital No. 17 from October 18, 1918, to March 23, 1920, was 8,100. There was a most varied assortment of cases, both medical and surgical. Acute infectious diseases, while at all times small in numbers, were present in every form found in a temperate climate. This was due to the association of the troops with the civilian population where infectious diseases were very prevalent and sanitary conditions very poor. The maximum number of patients in this hospital at any time was 500 on January 15, 1920. The average number in the hospital for the winter months of 1919 and 1920 was about 300. The normal capacity of the hospital was 400 beds, with possible expansion to 500. By crowding the enlisted men and utilizing some of the barracks space, an additional hundred were fairly satisfactorily accommodated.

This hospital closed on March 31, 1920, by the transfer of the personnel and patients to the U. S. A. T. *Crook*, which sailed for Manila on the above-mentioned date. The personnel transferred to

the *Crook* consisted of the following: Commissioned, 4; nurses, 10; enlisted, 183. The entire personnel were loaded on the *Crook* over the ice. The litter patients were transferred by bearers from the wards in the hospital to their beds on the transport, by being carried over the ice for a distance of 300 yards and up the ship's ladder directly from the ice to the deck of the ship.

Venereal Diseases.

The cases of venereal diseases admitted to sick report were classified approximately as follows:

	Per cent.
Chancroids	50
Gonorrhea	45
Syphilis	5

The following measures were taken for the prevention of this class of disease: Moving pictures by the Young Men's Christian Association; distribution of literature on the character, results, and prevention of venereal diseases; informal talks by medical officers at time of semimonthly inspections; and the maintenance of properly equipped prophylactic stations, including a centrally located station for the city of Vladivostok which was opened on November 12, 1919. Notwithstanding all endeavors to prevent these diseases, there were 2,959 new cases admitted, with 40,681 administrations of prophylactics. The low standard with respect to age and physical and mental qualification of the replacement recruits, and the temptations offered by the female population possessing a peculiarly low standard of morals and victims of distressing economic conditions, have contributed in no small degree to the excessive venereal rate.

Cholera Epidemic of 1919.

On August 26, 1919, the first case of Asiatic cholera occurred, and the epidemic was declared at an end on October 24, 1919. There were 487 cases with 287 deaths, all among civilians that had not been inoculated.

Dental Service.

Dental service, in so far as emergency treatment is concerned, was rendered as satisfactorily as the circumstances permitted, but thorough dental treatment of the command was not afforded. Due to exigencies of the service requiring many stations and substations with frequent changes of personnel, it was impracticable to complete indicated treatment.

DEPARTMENT SURGEONS.

NORTHEASTERN DEPARTMENT.

Health of the Commands.

The health of the command has been good, and no epidemics have occurred. A few defects in the sanitary condition of the posts, easily correctible, were reported by the department sanitary inspector at his inspections during the year. These defects were promptly corrected by the commanding officers concerned. Very few cases of infectious diseases occurred during the year, the greatest number being 10 cases of scarlet fever among recruits at Fort Williams, Me. A few sporadic cases of "Spanish influenza" occurred, but no deaths resulted therefrom.

Laboratory Work.

From January 1 to 24 laboratory work for the department was performed at the Yale Army Laboratory School. Since January 24 the laboratory at Camp Devens, Mass., has acted as the department laboratory for the Northeastern Department, in compliance with instructions from the Surgeon General. The establishment of a department laboratory at Fort Banks, Mass., was ultimately determined upon by the Surgeon General. In accordance with instructions from the War Department this institution was, so far as the question of discipline was concerned, to be under the post commander, but as regards its technical operation to function immediately under the department surgeon.

The greater part of a building formerly used as the post hospital was assigned to the department laboratory, the remainder of this building to be used for certain activities of the post hospital, viz, X-ray office and eye, ear, nose, and throat office. An estimate for the repairs and alterations for this building, amounting to $7,690, was forwarded to Washington on November 3. On December 1, no allotment of funds having been received and the personnel for the laboratory having meanwhile arrived, the department surgeon called the attention of the Surgeon General's Office to the delay and the allotment was immediately made.

Post Hospitals.

Military forces in the Northeastern Department are divided between the mobile forces of the mobile Army, Fort Ethan Allen, and 13 Coast Artillery forts scattered along the New England coast from Portland to Narragansett Bay. Eleven of the latter are gathered into three harbor groups designated, respectively, coast defenses of Portland, of Boston, and of Narragansett Bay. The largest of the harbor posts is Fort Banks, with a strength of command of 490, and Fort Adams, with 315. It is obvious that in posts of such small size, where only one medical officer is present, a complete medical service

can not be furnished and specialties can not be represented. It was recommended, therefore, by the department surgeon that a fairly complete medical service be developed at one post, Fort Banks, which should be equipped for the treatment of serious surgical cases and those requiring the services of specialists, these functions to be developed along the lines of a department hospital. This policy has been approved by the Surgeon General, although, on account of the necessity for economy in the appropriation for construction and repair of hospitals, it was not deemed possible to make during the coming fiscal year the necessary enlargement to the post hospital. Use will have to be made of a temporary building for the expansion above referred to.

Medical Department Recruiting.

The necessity for recruiting in the medical department has been brought to the attention of all medical officers in this department, and the department surgeon is assured of their hearty cooperation in this work. A medical recruiting party from the coast defenses of Boston has been in operation in the city of Boston since October 28, 1919, and has met with good success. All the emergency men of the Medical Department have been replaced by men enlisted in this department, and in addition 51 recruits have been transferred and 21 recommended to the Surgeon General for transfer to stations without the department.

Storage of Field Medical Equipment.

On September 16, 1919, the attention of the Surgeon General was called to the fact that admirable and abundant storage facilities existed at the Army supply base in Boston, and it was recommended that medical field equipment for one base hospital and the medical units of a division be stored in Boston. On October 8 the Surgeon General recommended to the Director of Purchase and Storage, War Department, that the following equipment be stored at the Army supply base:

One base hospital, 1,000 beds.
One evacuation hospital.
Four ambulance companies.
Four field hospitals.
Eight camp infirmaries.
Thirty combat equipments.

It was further requested that 7,000 additional square feet floor space be provided in suitable storage for the transportation, motorized and animal drawn, required for the four ambulance companies and the four field hospitals above enumerated. Favorable action was taken by the Director of Purchase and Storage upon this recommendation, and the assembly of the supplies was ordered. It was, however, ascertained about the end of December that on November 1 orders had been issued by the Director of Purchase and Storage to hold up the shipment of these units. Subsequent orders were issued about July 1 of the present year to forward the shipment.

EASTERN DEPARTMENT.

Health of Posts in the Department.

The department surgeon reports that the admission rate for the year was 660 per 1,000, while the admission rate in 1918 was 954. The noneffective rate was 7.31 in 1919 and 22.21 in 1918. Sanitary conditions at the various stations were in the main satisfactory. Most of the posts report that there were few, if any, cases of infectious diseases.

SAN JUAN, P. R.

The respiratory diseases were prevalent and caused 9.14 per cent of the admissions during the last three months of the year.

FORT WASHINGTON.

There were only four cases of malaria, none of which were contracted at the post.

Water Supply.

FORT DUPONT.

Bacteriological examination of the water in March showed that it contained colon bacilli. It was consequently said to be unfit for drinking purposes. The water was boiled until a chlorinator was installed in December. Since that time bacteriological examination has shown that it was safe to use the water.

FORT H. G. WRIGHT.

The water from the mains was found to contain colon bacilli. The rain water stored in cisterns was potable. Such water as was used from the mains for drinking purposes was either boiled or treated in Lyster bags.

HENRY BARRACKS.

The water supply was contaminated by five families on the watershed. The surgeon recommended that a filter system be installed.

FORT MYER.

It was necessary to double the amount of chlorine used in the water. At the end of the year eight parts per million were being used. The water which is filtered by rapid filter process was found to contain colon bacilli before chlorination. This was attributed to the fact that the sedimentation tank was only one-sixth as large as was necessary. It is understood that plans are being considered to build an additional sedimentation tank.

FORT NIAGARA.

It was necessary to chlorinate the water, which is obtained from the Niagara River where it empties into Lake Ontario.

Mosquito and Fly Control.

FORT HANCOCK.

The surgeon states that the control of mosquitoes is a great problem and that during September they were so numerous that the soldiers were obliged to wear headnets.

HENRY BARRACKS.

The surgeon reports that the protection against mosquitoes was so inadequate the men have to depend entirely on mosquito bars.

SAN JUAN, P. R.

It was reported that the mosquito and fly control is difficult, owing to the fact that the barracks are on the outskirts of a thickly populated city where the sanitary conditions are only fair. Barracks are unscreened. The kitchen screens are in many cases unsatisfactory. Post order requires that mosquito bars be used after taps.

SOUTHEASTERN DEPARTMENT.

Sanitary Conditions of Post.

FORT BARRANCAS, FLA.

Should it be necessary, on account of infectious diseases at Jackson Barracks to route recruits to the Canal Zone through a port other than New Orleans, it is recommended that the unoccupied cantonment buildings at Fort Barrancas be used for such casuals, and that they be embarked at Pensacola. Fort Barrancas is 6 miles from Pensacola, and transportation is available.

Ground near the bay is ditched, and oil drips have been installed. Surface water after heavy rains is very rapidly absorbed or flows to the bay through drainpipes.

The only prevailing disease during the year was influenza. There were 17 cases reported in January and February.

FORT CASWELL, N. C.

The water supply is obtained from four deep wells about 4 miles from the post. The country for miles around is uninhabited and uncultivated; about 10 acres of land adjoining the wells are inclosed by hog-tight wire fence; the site is occupied by the pumping plant and a small cottage, the home of the engineer and his family (an exceptionally healthy family). This water has been consistently reported as unfit for drinking purposes in the untreated state. During July, August, September, and a part of October, samples were forwarded at two-week intervals to the department laboratory, Fort McPherson, Ga., and during the same period several samples were sent to the Army Medical School, Washington, D. C. The school confirmed the findings of the department laboratory, i. e., the persistence of *B. coli*. As delivered to the post, after chlorination, the water is reported as safe.

A central chlorinating plant was installed in May, 1919; it had a capacity of approximately 1,000 gallons of water per minute. The pumping plant was capable of delivering only 300 gallons per minute, and the chlorinator could not be throttled down to properly care for so small a volume of water in a given time. It was the practice to overchlorinate for one hour and deliver water without treatment for three hours, on the theory that the overchlorinated water in the storage tank would take care of the water which had received no treatment. This method was unreliable, but was adopted to avoid overchlorination of the entire water supply. On January 28, 1920, a smaller chlorinator of suitable capacity was installed and is working satisfactorily.

FORT CROCKETT, TEX.

The only epidemic that occurred during the calendar year was influenza, of which 19 cases developed during January and February. Water is obtained from the city of Galveston. This water originates from a series of artesian wells ranging from 800 to 1,800 feet deep, located at Alta Loma, Tex., 14 miles from the city. The surgeon has been informed by the department laboratory that *B. coli* have been isolated. An investigation shows that this water is stored by the city in uncovered iron tanks. It is probable that contamination from bird droppings had occurred. This matter has been taken up with the municipal authorities and steps inaugurated to clean out the tanks and prevent further contamination.

FORT MORGAN, ALA.

Sanitary conditions at this post are reported as satisfactory. From January to March influenza was the prevailing disease. Fourteen cases developed during this period; one case was complicated by broncho-pneumonia and resulted in death.

FORT MOULTRIE, S. C.

A total of 16 cases of influenza occurred at Fort Moultrie during the first part of the year.

FORT SCREVEN, GA.

The water supply at this post has been unsatisfactory, chlorination being necessary. Water is obtained from drilled wells located in the middle of the reservation. These wells were developed about 17 years ago and are 160 feet deep; they are provided with single casings. An inspection showed these casings were badly pitted. Tests made with the use of fluorescin showed a leakage of surface water into the supply. Efforts are being made to remedy the existing defects.

JACKSON BARRACKS, LA.

The surgeon reports that the buildings are in very poor condition, and that the temporary structures, constructed during the war, have not been rat proofed. Many of the buildings on the post should be torn down and new ones constructed. This work is hindered by lack

of funds. The old stable will be torn down and a new one erected. The reservation swarms with culex mosquitoes. Steps have been taken to thoroughly screen all barracks and quarters.

About 85 per cent of the cases sick in the hospital and in quarters are from casuals on their way to Panama. There are many cases of respiratory and other infectious diseases among these recruits. Most of them prove benign, but some are rather severe and persistent. Owing to the early shipment of these recruits from depots, they seldom have had triple typhoid prophylaxis completed. There are many admissions following inoculation. Vaccination against smallpox, prior to the arrival of these recruits, is also very incomplete

FORT LOGAN H. ROOTS, ARK.

The water for use at this post is obtained from the city of Little Rock. On January 15 a telegram from the department laboratory was received, reporting the finding of *B. typhosus* in sample of water taken from one of the faucets in the hospital. Within one-half hour after the telegraphic report was received all drinking water on the post was being boiled. The post reservoir was drained, thoroughly scoured, and sprayed with concentrated calcium hypochlorite solution.

Recommendations of Department Surgeon.

In order to prevent, as far as possible, the communication of disease to posts and stations in this department from recruit depots, it is recommended—

(*a*) That all recruits be detained at depots for at least 30 days.

(*b*) That typhoid prophylaxis, consisting of three doses, be completed at the recruit depot.

(*c*) That each recruit receive at the depot a second vaccination against smallpox should the first vaccination prove unsuccessful.

(*d*) That no recruit be released from the depot for assignment elsewhere until the surgeon has certified that the recruit is free from contagious disease and is not a contact from such.

(*e*) That all official papers which ordinarily accompany the recruit from the depot post or station to which assigned be finally inspected by the surgeon that he may verify the correctness of the entries which pertain to the physical condition of the recruit and which may have a bearing on him as a potential source of infection.

SOUTHERN DEPARTMENT.

Sanitation.

The general sanitary conditions of all posts and stations in the department is good, and very few, if any, of the diseases can be attributed to poor sanitation. The general police and care of grounds in all places have been kept in a high state of efficiency, due to the cooperation of commanding officers with the medical officers and the carrying out of the recommendations of the latter in sanitary matters

HOUSING.

New buildings of a more permanent construction for the proper housing of both officers and men in most of the border stations have been erected during the year, which will tend to improve to a great extent the health, morale, and comfort of the troops in those undesirable stations.

HOSPITAL BUILDINGS.

The building done did not include construction of, or additions to, hospital structures, which are mostly of frame, unpainted, pavilion type, built in 1916, and are now approaching a condition not suitable for the treatment of the sick. The roofs of these buildings are of tarred paper which, during this time, has rotted and is leaking badly in many places and should be replaced by some more permanent roofing material, because many, if not all, of these stations will be garrisoned for years to come.

SCREENING.

Mess halls and kitchens are screened against flies, but this screening soon becomes worn out and has to be frequently replaced.

DISPOSAL OF WASTE.

The disposal of wastes, particularly of garbage and manure, is very satisfactory. It is either burned in an incinerator or removed by contract with civilians, who haul it away from the reservations. Screened garbage stands are erected in nearly all the larger stations. Human wastes are properly cared for, either by sewers where available or by carefully constructed pit latrines.

WATER SUPPLY.

This has been good in nearly all stations except a few on the Rio Grande where the water was furnished untreated. This particularly applies to the Brownsville district at Fort Ringgold, but distilled water is now being furnished by a water company for drinking and cooking purposes. At Camp Stanley the water was pronounced unfit for human consumption by the department laboratory. This was due to Mexicans inhabiting the ground composing the watershed and causing the presence of colon bacilli of fecal origin in the water supply. This has been remedied by the installation of an automatic chlorinator which has rendered the water potable. Frequent examinations are made of the drinking water from all the stations by the department laboratory. No sickness can be directly traced to the water supply.

FOOD SUPPLY.

This has been uniformly plentiful and of good quality. One or two cases of ptomaine poisoning in organizations have occurred, but each time this could be traced to some local cause or carelessness at the station.

Special Diseases.

VENEREAL DISEASES.

These diseases are always present, but with the measures adopted there has been a manifest decrease. They have prevailed more among the colored troops than among the white. The three posts where Negro troops are stationed have the highest admission rates—Columbus, Fort Huachuca, and Nogales. A great many of these cases are contracted in civil life by new men joining the various commands in this department and by others while on furlough. This is the report on the questionnaire turned in by the surgeons for each new case reported.

Prophylactic stations are established at all military stations and are properly conducted. In some of the towns, particularly San Antonio, a station is maintained also. A course of lectures and film representations were given twice throughout the entire department, by a competent and well-instructed noncommissioned officer. The commanding officers of all the posts fully cooperated in this matter and ordered the attendance of all men at these exhibits. It is believed this course should be repeated every six months.

I do not put much faith in the questionnaire sent in with the weekly venereal reports, as the replies are made by the enlisted men who have become diseased. They are, in many cases, believed to be unreliable and not satisfactory to base statistics upon.

For the first six months of the year the new case rate per 1,000 per annum was 53.66; the prophylactic rate was 465.16. For the last six months the new case rate per 1,000 per annum was 78.19; the prophylactic rate was 338.77. The annual case rate for the whole year was 60.4; the prophylactic rate 407.545.

About October 1, 1919, the method of treatment of venereal diseases was changed and it is believed with better results. All cases, except those having complications or such manifestations of syphilis as render them dangerous to others, are kept on a duty status and are required to report at the hospital or infirmary for treatment as directed, instead of being placed in hospital for treatment throughout the course of this disease. They are confined to the limits of the post. This plan has the advantage of giving the men to their organizations for such duties as they can perform and prevents a great loss of time in hospital while other men are doing the work of venereal cases carried on sick report. The continued high venereal rate for the latter part of the year is accounted for by the large number of recruits arriving at posts in this department, who at the time of joining had venereal diseases. This is especially true in the colored regiments.

A most gratifying reduction in new cases made of record has resulted from various measures taken to curb the diseases. Among these probably the most salutary is the direct admonition to commanding officers from the department commander when the annual admission rate of a command rises to a point over 50 per thousand. Under this measure the rates for the last three months of the year were in great contrast to those of the preceding three months. Other measures have taken the form of deportation of infected women by the civil authorities, the summary trial of men neglecting prophylactic treatment, and the educational measures instanced above.

MALARIA FEVERS.

During the latter part of the year, owing to heavy rains and overflowing of the Rio Grande, mosquitoes in great numbers appeared in the lower posts of the Brownsville district, and malarial cases were reported to a rather alarming extent. On closer examinations many cases proved not to be malaria. The principal mosquito found around Fort Sam Houston is the Stegomyia. But few Anopheles have been found during the last year. Measures will be taken this coming spring, as previously, to reduce the number of these pests.

CENTRAL DEPARTMENT.

No epidemic diseases of any importance in the Central Department.

The sanitary conditions were all reported as satisfactory.

The admission rate was 497.8; the noneffective rate, 14.52; the death rate, 3.02.

WESTERN DEPARTMENT.

Sanitation.

DISH WASHING.

It was found that at nearly all posts the washing of dishes and mess kits had not received proper attention, either in company barracks or in the hospitals. All commanding officers were directed to personally inspect the system employed and take steps to comply with the provisions of Paragraph II, Bulletin No. 66, War Department, December 31, 1918, and report to these headquarters action taken.

FITTING OF SHOES.

In many organizations the proper fitting of shoes was neither receiving attention nor being carried out as contemplated by paragraph 4, Special Regulations, No. 28, War Department, as amended by Changes Nos. 1 and 3. Complaints that sizes asked for were not furnished by the zone supply officer were investigated and steps taken to provide proper shoes. This action was not taken in the case of Fort D. A. Russell, Wyo., and Fort Douglas, Utah, as supplies for these posts are furnished from the St. Louis depot.

Many complaints were received that "Resco" foot-measuring machine, supplied by the Quartermaster Corps, did not give proper measurements for a man with a high arch.

Venereal Diseases.

The campaign against venereal diseases has been actively continued. Literature, approved by the War Department, has been distributed and motion-picture films and stereomotograph slides have been sent to posts for the purpose of illustrating lectures given by the surgeon. The total number of cases reported was gonorrhea 1,053, chancroid 38, and syphilis 134. Reports received show 3,077 prophylactic treatments recorded, a rate of 300.48 per 1,000.

PHILIPPINES DEPARTMENT.

The department surgeon reports that the health of the command has shown improvement over that in 1918 as regards respiratory diseases, and also in venereal diseases. Owing to the prevalence of cholera throughout the Philippines, particularly in the vicinity of Manila, 20 cases occurred, as against 3 for 1918. There were but 5 cases of smallpox, against 27 for 1918. In his opinion some improvement has resulted from the construction of "Scout barrios" at the larger posts, thereby bringing the Scouts and their families under better sanitary control.

The admission rate for malaria was higher than in 1918. This was probably due to deterioration in wire screening and absence of it for certain buildings at Camp Stotsenburg, Camp Eldridge, and Pettit Barracks. Appropriate steps have been taken to correct these conditions.

Post and Subpost Garrisons.

The troops were stationed at 11 posts and 4 subposts. No new posts were established during the year. Camp McGrath, which was in course of dismantlement during the latter part of 1918, was finally abandoned April 23, 1919. The posts and subposts are as follows:

POSTS.

Department hospital, Manila.
Camp Eldridge, Laguna.
Camp John Hay, Mountain Province.
Camp Stotsenburg, Pampanga.
Camp Nichols, Rizal.
Cuartel de Espana, Manila.
Fort Mills, Corregidor Island.
Fort Santiago, Manila.
Fort William McKinley, Rizal.
Pettit Barracks, Mindanao.
China Expedition, Tientsin, China.

SUBPOSTS.

Fort Wint, Grande Island.
Fort Hughes, Caballo Island.
Fort Frank, Carabao Island.
Fort Drum, El Fraile Island.

All cases requiring hospital treatment from subposts are sent to Fort Mills, Corregidor Island. Those from Cuartel de Espana, Camp Nichols, Fort Santiago and United States Army transports are sent to department hospital, Manila.

Condition of the Hospital Buildings.

The general condition of all the hospitals in the department is very good, except at Camp Eldridge and Pettit Barracks. During the year second stories were placed on the following buildings at the department hospital: Building No. 12, used as post exchange, library, barber shop, and recreation room; building No. 24, containing a series of rooms occupied by noncommissioned officers, Medical Department; building No. 26, to be used for surgical and female wards. A new operating pavilion was in course of construction and was about 80 per cent completed. It is the plan to use part of the building for the X-ray and eye, ear, nose, and throat clinics. It is contemplated for the year 1920 to add an additional story to the remaining one-story buildings now being used as wards.

Dental Service.

A systematizing of the dental service in the department during the past year resulted in not only a substantial increase in the number of dental operations performed, but a greater distribution of the work, thus supplying dental service for practically all officers and enlisted men.

A scheme of checking and grading the individual amount of work of each dental officer was devised. This seemed largely responsible for the increase. Dental surveys of the entire enlisted personnel of the department were made by companies or detachments and reports made to this office, where they were recorded. With this "dental survey record" (Form No. 5, D. D. S.–PD) the percentage of troops who had received dental treatment was always available to determine where the services of dental officers was most needed, so that assignments could be made accordingly. This record also prevented any neglect to treat men who might otherwise be overlooked by the dental surgeon and reached men who would willfully attempt to avoid the dental chair. A roster of officers on duty in the different posts is kept by the post dental surgeon, and at necessary intervals the officers are invited to appear for an oral cavity examination. If treatment is necessary, they are given appointments for subsequent sittings.

In the system of recording and crediting the number of dental operations performed by each dental officer a blank form was prepared, "Individual numerical dental summary" (Form No. 2, D. D. S.–PD), on which is printed a list of all operations and time credit placed after each. At the end of each month, after the dental reports were received, the number of operating hours during the month are determined. Having the total time credit, the actual number of hours a dental officer has spent at the chair during the month is known. With these two figures the percentage of time occupied in the practice of dentistry may be computed. This system placed the amount of work of the individual dental officer on a percentage basis. They were informed that their percentage rating would be a factor, in reality a competitive factor, in determining their general efficiency and assignment to stations or other favors. The increase in the general average number of dental operations from month to month was most gratifying. The general average of the department for the month of August, the first month the plan was put in use, was 73 per cent; for September it was 97 per cent; October, 104 per cent; and November, 113 per cent. The increase from August to November was 40 per cent, which indicates a 40 per cent increase in the number of dental operations performed during this four months' period.

A lack of sufficient dental officers has been a great handicap. A compilation of the dental survey records of the department for the year would indicate that with the present strength of command there should be at least 19 dental officers on duty to make examinations and complete the dental treatment of all cases once every six months.

The permanent assignment of a dental officer and installation of a base dental outfit on each of the trans-Pacific passenger-carrying transports is recommended.

A member of the Nurse Corps has been permanently placed on duty at the dental clinic of the department hospital. Her duties are principally to sterilize instruments for all the operators, assist in oral-surgery operations, and give especial attention to women patients. As a trained nurse is known to be qualified in sterilizing procedure, it is thought that her mere presence will give the patient an added feeling of security.

There has been an almost complete change in the dental office equipment in the different posts and considerable improvement in the different dental office buildings, such as remodeling and redecorating. Most of the dental furniture, chairs, cabinets, etc., had become obsolete and were replaced by the later model sanitary or white-enamel variety. Additional equipment has been requisitioned for, as nitrous-oxide and oxygen-gas outfits and portable radiograph machines. It is the intention to make absolutely modern dental offices at the four base dental stations in the Philippine Islands—department hospital, Fort William McKinley, Fort Mills, and Camp Stotsenburg.

Army Nurse Corps.

During the past year members of the Army Nurse Corps have been stationed at the department hospital, Manila; post hospital, Fort William McKinley; post hospital, Fort Mills, Corregidor; three were sent in May, 1919, to the military hospital, Tientsin, China, for duty with the China Expedition; and two in December, 1919, to the post hospital, Camp John Hay.

Owing to the increase in the number of patients, additional nurses are much needed at the department hospital, Manila, but at the present time there are no quarters available for their accommodation. It is contemplated, however, to add another story to the one of the present buildings, which will provide accommodation for at least 10 more nurses. Nurses' quarters are also to be constructed at Camp John Hay in the near future.

Sanitary Privates.

These men are detailed, two from each company of the Scout regiments, for duty at the hospital, just as men from the line were detailed before the organization of the Hospital Corps. As they hold no noncommissioned grades, there is no incentive for the better class of Philippine Scouts to seek these details. It is not possible to instruct the ones received so that they may qualify to perform the duties necessary for the medical detachments with regiments in active service. They, with a few exceptions, are laborers. It is believed that it is practicable to organize an enlisted Medical Department for the Philippine Scouts by offering the same inducement that is given the enlisted Medical Department.

Special Diseases.

LEPROSY.

One case was reported from department hospital—an American white man who was transferred to this department from the Letterman General Hospital, and sent to the leper colony at Culion, P. I.

CHOLERA.

Twenty cases were reported during the year: 9 American, white, and 11 Philippine Scouts. Twelve deaths occurred: 5 Americans and 7 Philippine Scouts. Cases were as follows: Fort Mills, 5; China Expedition, 4; Camp Nichols, 1; department hospital 1; and Fort William McKinley, 9. Cholera has flourished during the year among the civil population throughout the entire islands, particularly so in Manila and immediate vicinity.

Special Reports.

The following extracts from reports by the surgeon at Fort Mills and the officer in charge of the department laboratory are of interest:

Fort Mills.—In my opinion the most manifest sanitary defects of the post have been in the quality of the water supply and in the handling of bread. The water supply of this command requires boiling for drinking purposes. It is universally polluted. All organizations maintain supplies of boiled water, and existing orders have been sufficient to inform all of the necessity of boiling water. There have, however, been numerous individuals who drank directly from the taps of the water system. An order has been recently issued specifically directing that no individual drink unboiled water, and directing prompt action in the case of any violation of the said order. Formerly the bread was handled by transient details, was carried on flat cars, and was touched and handled by many individuals, with no provision for cleanliness.

Specific action relative to detection and isolation of cholera carriers, to improvement of sanitary conditions in washing of dishes and mess equipment, destruction and prevention of flies and mosquitoes, making recommendations calculated to improve quality of food.

Opportunity is taken here to emphasize my belief that a very material proportion of the morbidity of this command is related directly to food conditions. Gastritis, enteritis, acute and chronic constipation are particularly prevalent. The ration consumed is very high in caloric value, low in bulk, and deficient in fresh vegetables. This condition is believed to be directly due to enforcement of subparagraph (e) of 1220, Army Regulations, as changed. The quality of exceptional articles secured from the quartermaster has been materially improved. However, because of the hazard and uncertainty relative to prices of fresh vegetables secured from the quartermaster, very few such articles are consumed. This condition can not be counterbalanced by the use of canned fruits and vegetables at present commissary prices. The present diet, composed largely of meat, potatoes, dried beans, bread, and fats, is believed to furnish the basis for much sickness, and to be accountable for much lowering of physical efficiency not included in morbidity figures. This condition, which perhaps affects this command most seriously, is believed to apply elsewhere. It is believed that the maximum of correction locally applicable has been approximated. I consider it practically impossible under the present system and local conditions to secure adequate and proper food for the sick without assuming financial risks which I am unable to meet.

The department laboratory.—The quarters assigned the laboratory are in good condition and well arranged, except that the north side, the only practical location for microscopic work, is too close to the adjacent ward building. This interferes with the light, particularly in the late afternoon, when it is almost impossible to do satisfactory work with the microscope except with artificial light. This can not be remedied except by moving the laboratory to other quarters, which is impracticable at present. It is hoped that eventually a separate building can be erected for the laboratory, perhaps on the site of the present animal house, which is sufficiently isolated to insure light on all sides.

The personnel of the laboratory at present consists of the officer in charge, one sergeant first class, two corporals, and four privates. In addition to this, at least three selected men should be under training in laboratory work. The men assigned should be selected for aptitude and interest in this line of work and replaced if they do not show the proper qualities. The idea is to train these men to be able to do independent work, with a view to their assignment to the smaller stations. It will take several months to do this, even with those having a requisite preliminary education and

native intelligence, so it is necessary that the men be well selected. It is further recommended that the personnel assigned to the laboratory be relieved from all other duties and responsibilities, except those common to all soldiers. This, that their attention and interest may not be diverted from this special work, that demands concentration for successful results. It is considered that the laboratory offers as much opportunity for the enlisted man as any other branch of the service, and those once assigned and trained and who prove their fitness should stay in it.

I am quite sure that some of the laboratory work, in some of the posts at least, in this department is not as good as it should be. Every laboratory, no matter how small, should be capable of making certain examinations, aside from the usual routine clinical work. I have in mind particularly the bacteriology of feces, which is practically hopeless on specimens that have to be sent through the mails, Widal's, dark-field examinations, frozen specimens, throat cultures, etc., should be examined locally, using the department laboratory as consultant, and in the case of the small laboratory, possibly as the source of supply of special culture media. It can be seen that well-trained men would be essential to those conditions. It is the idea of ultimately bringing the laboratory work of the entire department to a high plane of efficiency, that suggests the necessity for centralized training and control of laboratory personnel.

There is no necessity at present for additional commissioned personnel. When the routine of the laboratory is well organized and we can begin research, and especially if a school is established for the enlisted men, an additional officer will be necessary.

In conclusion, I wish to again emphasize the growing importance of the laboratory in relation to the scientific work in the islands. It will come more and more to be the duty of the Army to carry on the exploitation of the splendid material the islands offer. The two paramount thoughts in mind are, therefore, the development of the patho-rogical service in the department to its highest point of efficiency in its strictly Army legulations, and the reestablishment of the scientific work to the high plane it knew in former years.

HAWAIIAN DEPARTMENT.

Special Diseases.

INFLUENZA.

The ordinary rate of sickness and mortality for this department was modified by one epidemic only. A second wave of influenza occurred in the early part of the year, some six or eight months after the original epidemic. For some reason the troops were affected less than the civilian population. This second wave was not as severe as the former one; in other respects the two were similar. Among troops the admission rate per 1,000 was 44. There were no deaths. The treatment employed differed in no way from that followed in the earlier phase.

VENEREAL DISEASES.

The old "Restricted district" at Iwilei, which was abolished in 1917, has never been revived as a district. However, as usually occurs after such "cleanups," clandestine prostitution started in coincidentally and has continued ever since.

ALCOHOLISM.

Prohibition has continued to exercise a salutary effect upon alcoholism. Illicit liquors, known as "Okolehao" and "Swipes," are sold by bootleggers to some extent, but as yet not in sufficient quantity to cause any serious trouble. Alcoholism as a cause of admission to hospital is rare.

TUBERCULOSIS.

Here again the return to a regular status has materially reduced the rates. Tuberculosis is of frequent occurrence and high virulence among the native population. Among white troops the incidence has been very low.

TYPHOID FEVER.

The completion of the modern water-supply systems, including a chlorination plant at Schofield Barracks, makes it unlikely that the small epidemic of 1918 will reoccur. The disease is endemic in Honolulu, but has decreased markedly in the past year. No case has originated during the past year in this department among troops.

YELLOW FEVER.

In spite of the large numbers of the Stegomyia mosquito, yellow fever is unknown in this department. It is a potential menace and is becoming more so with the increasing traffic with South America.

BUBONIC PLAGUE.

This disease is endemic on the island of Hawaii. There were 7 cases, with 5 deaths, during the past year. The last human cases on Oahu was in 1909 and the last rodent case in 1910. Rat and mongoose trapping is carried on systematically, and all bodies are examined. The large number of rats and mongooses living on Oahu makes this disease important as a potential menace.

LEPROSY.

This disease is always present among the native population. A few cases have been detected among native troops, but no case has occurred in an American soldier.

PNEUMONIA AND BRONCHITIS.

Climatic conditions render these diseases relatively rare in this department. Such cases as do occur have always been mild.

OTHER EPIDEMIC DISEASES.

These have occurred only spasmodically. Troops recently landed from transports furnished most of the cases. A few cases of measles and mumps are frequently received, but almost never spread.

Disease Incidence in Posts.

There is no occasion for a discussion of disease conditions at various posts individually for the reason that all of the sick of this department are treated at the department hospital, the posts being separated by only a few miles. Conditions influencing morbidity do not differ appreciably at the various posts.

Department Hospital.

The department hospital is the one large military hospital of the islands. It is centrally located and serves as the hospital for all of the posts in the vicinity of Honolulu. It is the clearing house for all chronic and severe cases transferred to the mainland for discharge. The amount of professional work done is large.

Schofield Barracks.

HOSPITAL.

Owing to the size of the garrison and the distance to the department hospital (20 miles), the sick of this post are treated locally. Only the chronic and severe cases are sent to the department hospital. In the past, the post has been largely a cantonment. The hospital was of the same nature. The construction work on the main permanent post has advanced to a point where most of the troops have been placed in permanent quarters. The cantonment hospital is situated some 2 miles away, and the road to it is very rough. This is not entirely satisfactory. Plans for a modern, fully equipped hospital are at present being acted on.

WATER SUPPLY.

The water system of Schofield Barracks, which has been so much discussed and which in the past has caused trouble, is approaching completion. When finished it will supply some 10,000,000 gallons of excellent water per diem. As a precaution against possible future infection, a permanent chlorinating system has been installed in connection with it. This should secure to the post an ample supply of pure water.

SEWERAGE SYSTEM.

Like the rest of the post, the sewer system of Schofield Barracks in the past has been in an advancing stage, so to speak, and has never been quite satisfactory. This has been more because of the lack of capacity than of the quality. During the past year, however, a large extension for the use primarily of the newer portion of the post has been completed. Tanks are finished and in use, but only one set of filter beds have been constructed.

CIVILIAN POPULATION.

The feature which has caused more trouble than any other at Schofield Barracks is the method of handling the civilian population. The reservation is large, 3 by 2 miles in extent. It is bounded on all sides by cane and pineapple fields. There is only one inferior town where civilians, so indispensably identified with the life of the post, can house themselves outside of the limits of the station. The result has been bad. The post is being prepared for a garrison of possibly 20,000 troops. To neglect to also prepare for the civilian population is a mistake. It is true that this is not ordinarily done.

It is also true that conditions like these (where ground for miles around is already occupied) makes it impossible for them to provide for themselves. Primitive septic tanks now receive the sewage from this adjacent town. The effluent, which is fairly clean, is discharging into a gulch. It is not a sanitary menace at present, but is far from ideal. The subject should be taken up and a well-devised plan, based on sanitary principles, adopted. Otherwise, as in the past, the civilians must remain a menace to the health of the garrison.

PANAMA CANAL DEPARTMENT.

Sanitation.

Conditions effecting sanitation and administration changed materially during the year. These changes are reflected in a satisfactory manner in the statistics for the year 1919. The results have been affected partially (*a*) by the increased individual floor space per man in barracks and (*b*) the avoidance of unnecessary exposure.

There was a rise in the noneffective rate in September and October. This was due to the large number of gonorrheal and chancroidal buboes and other sequalæ of the venereal infections, which had developed and progressed to the state that they required operation and hospital treatment at that time.

Notwithstanding this factor of venereal infections on the incidence of diseases in 1919, there was a marked decrease in the total time lost from sickness. As far as possible, facilities should be provided for treating the sick in post hospitals. Men sick at a station can perform at least a certain part of their duties before they have completely recovered. This usually insures and hastens their convalescence. It is not possible for soldiers to do this in a general hospital where patients must be retained until they have entirely recovered. This factor was one of the most important ones in reducing the noneffective rate. The organization surgeons were urged to care for their own sick in their own post infirmaries whenever possible. Since there is a charge of $1.10 a day for the treatment of military patients in the hospital of the Canal Zone, the treatment of the military sick in their own infirmaries resulted in a saving of approximately $15,000.

Special Diseases.

VENEREAL DISEASES.

The drastic restrictions so effectively imposed as a war-time measure for the control of venereal disease was modified on July 26, 1919. The military control was then discontinued, and the sale of liquor was permitted on the Canal Zone by the civil authorities. The eviction of objectional persons was also poorly enforced. An order was issued permitting soldiers who were considered reliable to reenter the terminal cities. The viciously inclined were denied this privilege. The condition in these cities are such that the satisfactory reduction of venereal disease will probably never be affected unless the same laws that are effective in the United States for the prohibition of liquor and the suppression of prostitution become operative. It is now held that the control of these evils are not health measures,

which under the existing treaty could be controlled by the United States, but are police measures and as such are not subject to interference by the United States.

Prophylactic stations attractively furnished and conveniently located were established in the cities referred to. An active program of instruction by lectures, with the exhibition of moving-picture films and posters, was conducted by an officer assigned for this purpose by the Surgeon General.

MALARIAL FEVERS.

Special efforts have been made to reduce the incidence of malarial fever (1) by the prompt repair in defects in screening, (2) by the generous use of trained mosquito catchers, and (3) by ditching to drain breeding areas. Ditches have been lined by section cement tiles to avoid eddies. Parallel drains have been constructed on hillsides to avoid seepage holes. Extensive drains with lateral extensions have been constructed to drain the Sweet Water and Margureta Island swamps on the Atlantic side. This resulted in the removal of the fresh water and the flooding of the swamps with the tidal salt water, with a reduction in the number of the mosquitos in this region. The outlet of the Gardenas River was lowered, thereby draining a large mosquito area near the post of Corozal and adjoining the new post of Fort Clayton.

In addition to these measures, there was careful investigation made of every case of malarial fever to determining the probable place of infection. Much trouble was encountered from recurrent attacks of malarial fever. To eliminate these recurrent attacks, measures were taken to insure systematic use of quinine.

UNITED STATES ARMY GENERAL HOSPITALS.

WALTER REED GENERAL HOSPITAL.

This hospital serves as the general hospital for the eastern United States and as the post hospital for troops stationed in and around Washington.

The sanitary features of this post are satisfactory. The sewerage and drainage is disposed of by the sewerage system of the city of Washington. Garbage is carted away daily, except Sunday, by local contracts. Water is supplied by the water department of the city of Washington which draws upon the Potomac River, about 22 miles upstream, and filters its water through large filtration reservoirs in the city of Washington.

The construction of temporary buildings for this post was begun in June, 1917. Seventy-four were completed in 1918 and 22 in 1919.

Hospital laundry was done under contract with Elite Laundry Co. The laundry for the enlisted men on duty is done at Camp Meade laundry at a nominal charge of $1 per month.

The Detachment of Enlisted Men.

At the beginning of 1919 there were 1,090 men on duty, practically all emergency men, only 70 being of the Regular Army. The discharge of these men proceeded slowly, depending on replacements. Frequently during the year emergency men from other hospitals that had been closed were sent here for duty, hence the number of men actually discharged is greater than the number of men on duty on January 1. While the replacement of emergency men was taking place during the entire year, the actual permanent replacements by Regular Army men began about August 15, when the first contingent of recruits arrived from Fort Slocum. They continued to arrive at various times until the end of the year. These men, mostly under 21, some under 18, did not at first prove of much value to the hospital, but after careful instruction and training, with needed discipline, etc., they bid fair to be quite satisfactory. A psychiatric survey of the entire detachment will probably be instituted in order to dispose of those found to be mentally deficient.

Army Nurse Corps.

NUMBER ON DUTY.

In January, 1919, there were 166 nurses on duty. A number of others were received during the year. Two hundred and sixty-seven nurses were sent home to await discharge or relief from active service, and eighty-four were transferred from this hospital, 7 of whom went for service in Siberia and 7 for service in Honolulu.

SCHOOL OF NURSING.

The first student nurse arrived August 5, 1918. In September there were about 45, 9 of whom were of the training class of the Vassar College. In November 25 were received. These young women had been helping during the influenza epidemic at Camp Humphreys. To this last group 26 probationers were added, making a class of 51. At the beginning of January, 1919, there was a total enrollment of 76 students in training. During February and March these students were accepted as regular members of the Army School of Nursing, upon the completion of their four months of probationary training.

In March and April all these who came in only for service during the war emergency period were released from the fast closing camps. Those who desired to complete the three-year period of training were in many cases transferred to the Walter Reed General Hospital. This policy of concentration was continued throughout the year 1919. In December, 1919, the total enrollment was 112, and in this number were represented students from practically all the units of the Army School of Nursing formerly organized in connection with eastern military hospitals.

MOVEMENT OF THE SICK.

	Officers and enlisted men.	All others.	Total.
ADMISSIONS.			
Remaining Dec. 31, 1918	1,766	47	1,813
Admitted from command, 1919	1,060	178	1,238
Admitted by transfer, 1919	3,077	69	3,146
Admitted otherwise, 1919	3,949	778	4,727
Total	9,852	1,072	10,924
DISPOSITIONS, 1919.			
Returned to duty	4,335	203	4,538
Died	88	24	112
Discharged on disability	2,127	.....	2,127
Deserted	65	.....	65
Transferred to insane asylum	27	.....	27
Transferred to other hospitals	953	30	983
Otherwise disposed of	650	717	1,367
Total	8,245	974	9,219
Remaining Dec. 31, 1919	1,607	98	1,705

SURGICAL SERVICE.

The surgical service, with a chief and an assistant, comprises the following sections, each with a chief and a variable number of assistants, according to the amount of work in each section.

AMPUTATION.

A large number of amputation cases were received during the early part of the year from overseas, some showing definite sequestra, others with complicating wounds requiring treatment by other services and a

great majority with badly infected gillotines. At least 90 per cent of these cases required operative treatment of some character before they could be fitted. Post-operative infection of low grade was frequently encountered, but the percentage of cases requiring reoperation was very small.

OPERATIVE FINDINGS.

A large number of cases, particularly of thighs, showed marked spur formation and bone proliferation at the end of stump which was apparently due to the nonremoval of the periosteum. The fibula, in stumps below knee, was usually as long or longer than tibia, and the crest of the tibia was usually not beveled. Practically all healed gillotines showed extensive adherent scars, more or less painful, which would not stand the pull of soft parts when the case was fitted. These scars required plastic removal. An aperiosteal operation should be done at all times, one-fourth inch being removed above the saw line. No periosteum should be left in soft parts and it should not be stripped from the bone. Most gillotines can be closed by some plastic procedure without bone shortening, providing they are properly treated with early traction of soft parts, and providing the bone is healthy. Excessive muscle pads should not be used in primary amputations. Nerves have been injected with 95 per cent alcohol and cut as short as possible. The use of alcohol to lessen formation of neuremas is questionable.

FITTINGS.

Noninfected stumps have been fitted routinely six weeks after the operation; others three weeks after healing. Numerous makes and types of buckets for thigh and leg fittings were purchased and tried. Some could never be used, owing to improper molding. The shop for fitting of artificial appliances has fitted as high as 156 cases in one month. The work has improved in character and amount since soldier labor has been replaced by skilled leg fitters.

PHYSIO-THERAPEUTIC DEPARTMENT.

This department has assisted in the massage of stumps and in the application of elastic bandages to improve circulation, aid shrinkage, make stiff joints mobile, and has given instruction in the use of appliances. Patients are assigned to a walking class for one hour instruction daily, after being fitted. They usually become proficient in the use of the appliances in from three to four weeks and then are ready for discharge. All were instructed in the care of the stump, adjustments made in appliances as shrinkage occurred, and all were examined by the chief of the section prior to discharge to determine the correctness of the fitting and the condition of the stump. Arm amputations after fitting were assigned to the occupational shop for instruction in the use of the appliance. Fittings for hip disarticulation and certain other stumps which could not be properly fitted from stock were ordered from permanent artificial limb makers.

DENTAL.

The dental service is divided into five subsections—dental hygiene, X ray, operative, prosthetic, and oral surgery. There was one dental officer for the survey of patients. The prosthetic department was organized in January for the construction of splints for facio-maxillary cases and prosthetic restoration of all kinds. There were five female technicians on duty in the hygenic department of the clinic. The advisability of employing them in Army general hospitals has been demonstrated both from a professional and financial standpoint, as it enables the dental officers to spend their entire time operating.

EYE, EAR, NOSE, AND THROAT.

A large part of the throat work was done to remove focal infections.

EMPYEMA.

In March this hospital was designated as one of the concentration points for chronic empyemas, and has since functioned in that capacity. Most of the cases received were of long duration, relatively few being acute; practically all of the latter were from the influenza epidemic of 1918–19. No case on which a primary operation was done at this hospital during the year became a chronic case; all these cases have been disposed of or are healed and awaiting disposition at the end of the year.

The acute cases were treated by continuous drainage and intensive Darkinization; the chronic cases (coming from other posts) received (1) correction of all factors leading to the chronicity, such as foci of infection in ribs, faulty drainage, retained foreign bodies, presistent bronchial fustulae; (2) intensive Darkinization in hope of attaining sterility and allowing spontaneous closure of drainage opening; and (3) collapse of the chest wall over the cavity, thereby obliterating it. Wherever complete decortication of the cavity could be done with the collapse of the chest wall it was undertaken. The mortality was less than 5 per cent.

FACIO-MAXILLARY.

The first facio-maxillary patients arrived at this hospital on January 15, 1919, at which time this was one of the three hospitals designated by the Surgeon General to receive this class of patient. They were scattered throughout the surgical wards until a chief of the section was detailed in February, when they were assembled in three wards. Prior to March very little surgical operative work was done.

On February 21, 1919, in compliance with instructions received, a thorough system of recording these cases was begun and has been continued. On December 31, 1919, over 800 photographs, a large number of wax models, drawings, and descriptions had been made illustrating from a scientific point of view all cases of interest. In addition all dental splints made overseas or in the United States were being mounted. They should be of great scientific value as there is no type of jaw fractures which has not been represented in

this series. Sketches of operations performed were made in many cases to supplement photographs and models. Cases are classified into four groups—bone graft, scar excision, superficial plastics, and deep plastics. Coordination with the dental surgeon, who is responsible for a necessary part of the treatment of most of these cases, was established at an early date.

NEURO-SURGICAL.

The majority of the cases of this service are the result of gunshot wounds incurred in action, with less than 5 per cent the result of accident or disease. Peripheral nerve injuries constitute the majority of the cases. Thirty per cent were operated upon, 20 per cent of which showed that the nerve was divided. In view of the proportion of cases in which the lesion was found to be of such a nature as to prevent spontaneous repair early operation was recommended where any doubt existed as to the presence of regeneration.

In suitable cases where the use of nerve grafts was indicated two or three stage operations were done, the neuremata being approximated by tension sutures until resection of nerve ends and neurorrhapy could be accomplished. This method was generally preferred except where the loss of nerve was extensive or ankylosis prevented the usual manipulation to secure elongation of the nerve trunk.

Of the spinal injuries 59 per cent resulted in flaccid paralysis and 41 per cent in spastic. Under prolonged treatment by graduated exercises and physio-therapy, encourageing results were obtained. Special application of diathermy and sino wave for paralyzed sphincters appears to have been of benefit in a few cases. Laminectomy and exploration of the lesion was done only where there was reason to believe there was compression of the cord or nerve roots.

Ten per cent of the head injuries developed epilepsy with convulsions. In 25 per cent there were defects of the skull of sufficient size to indicate repair. Osteo-periosteal graft under local anesthetic was the method of choice. No distinct change in the neurological symptoms was noted as a result of these operations, but general improvement in the subjective symptoms occurred. In cases of paralyses of central origin the benefit derived from graduated reeducational exercises was even more evident than in similar conditions of spinal origin. The mental disturbances such as aphasis, amnesia, and irritability following severe concussion, were systematically treated with occupational therapy.

ORTHOPEDIC.

The majority of the cases in this section were deformities resulting from gunshot wounds received in action overseas, and a large number of orthopedic conditions unsuccessfully treated at other general hospitals. There was also a large number of acute fractures of all types and quite a few cases of chronic arthritis. Many of these latter were due to focal infections. A large number of gunshot wounds involving the upper extremities had limitation of motion, especially in the fingers. The latter condition was treated by elastic traction with finger splints.

ROENTGENOLOGY.

The character of work done has varied from month to month. Daily bedside radiographs were made of all pneumonia and influenza patients during the epidemic. A large majority of the examinations during January were of the chest. The number of patients with purely battle casualties diminished gradually, and the quota of more or less civil injuries and diseases increased. There was a considerable increase in the relative number of gastro-intestinal examinations. No X-ray burns or other untoward effect were noted. A separate room for roentgen-therapy is maintained, and has been of considerable value in certain selected cases.

SEPTIC SURGERY.

The work of this service was concerned principally with old war injuries from overseas and with cases unsuccessfully treated at other general hospitals, involving bones and complicated by chronic suppurative osteomyelitis. In addition there was a number of current septic cases both of bone and soft parts. The standardized Carrel-Dakin technic was closely followed in treatment of these cases, and the results obtained have fulfilled all expectations. The most marked results are the absence of odor even in the most virulent infections, the practical absence of pain (morphine has been rarely used), and the rapid cleaning up of all wounds.

The final disposition of the cases on this service was delayed by the chronicity of practically all of them, and the necessity of additional orthopedic or neuro-surgical treatment after the septic condition had subsided.

UROLOGY (DERMATOLOGY INCLUDED).

The amount of cystocopy (including ureteral catheterization and pyelograms) was very large. The work was well done. There was a large number of nephrolithiasis cases, most of which came to operation. The treatment by use of distilled water for the passage and prevention of recurrence of calculi was tried on six cases over periods of two months time but without any results.

Resistant gonorrhea was treated by puncture of the vas with collargol injection. This was also done in uncomplicated vesiculitis and prostatitis, with striking improvement. Chronic prostatitis was treated with good results by sinusodial electricity and diathermy. Nothing unusual developed in the treatment of other venereal conditions or of skin diseases with the exception of the new antiseptic, mercuro-chrome-220. This has been tried with satisfaction on one case of chronic cystitis and bilateral pyelitis with a colon bacillus infection.

GENERAL SURGERY.

This section has handled a large number of gynecological and of acute clean surgical conditions of varied character during the year. Uncomplicated hernias, appendicectomies, and similar routine operations were nearly all performed by medical officers assigned here for

surgical instruction and by junior officers on duty at the hospital. Other operations were performed by the chief of the surgical service. The latter, as well as his assistant, keeps in close touch, by frequent daily visits, with all patients in this section.

On account of the unusual amount and variety of surgical cases at this hospital resulting from the war, a three-month course of surgical instruction for regular medical officers was begun the latter part of June. This consisted of a series of lectures by section chiefs, the assignments of each officer to each section for one week's practical instruction in the wards, together with assistance in operations performed. Each officer was given variable amount of ordinary surgical operations (especially herniotomies and appendectomies) to perform depending on the amount of such clinical material available during their tour. Forty-one officers took this course.

After the middle of November the course in military surgery for the Army Medical School was given at the hospital. This consists of a weekly lecture and quiz, assignment in groups of six or less to each section for practical clinical instruction and the utilization of these officers as assistant in operations. It is intended to have each officer perform an appendectomy and herniotomy before completion of this course.

The personnel of the surgical service is also utilized as instructors for student nurses of the Army Training School in various surgical subjects.

Medical Service.

GENERAL MEDICAL.

The medical service is divided into the general medical service and neuro-psychiatric service and receiving ward. The general medical service consists of the officers' section, women's ward, contagious-disease section, and noninfectious-disease section. In the medical service there were 1 chief, 1 assistant chief, 2 chiefs of section, and 9 ward surgeons or assistant ward surgeons. The neuropsychiatric section had 1 chief of section and 5 assistants. The general medical service conducts the physical examination of, and furnishes medical attendance for, the medical department and civilian personnel at this hospital, a population of 1,700. It also furnishes a consultation service for medical conditions in other services at this hospital. An officer of the medical service admits all patients to the hospital at the receiving ward.

During the past year the majority of cases of influenza were those convalescent from the influenza epidemic, and its complications, occurring during the latter months of 1918. During the fall of 1919 there were a few cases of acute respiratory diseases, namely, bronchitis and coryza, such as usually occur with the change of season. There were no deaths. No cases of epidemic influenza occurred at this hospital in the fall and early winter of 1919–20.

NEUROPSYCHIATRIC.

The records show that during the year 1919 over 1,200 cases of mental conditions were treated. These figures represent definite cases that were transferred to this service, but there are large numbers

of cases where the nervous condition is secondary or the mental state while abnormal can not be classed as a definite psychosis, and hence would not appear in the records as such; yet these conditions, in the course of illness, require most careful study and attention. In fact the proper mental attitude and emotional tone in the light of modern pathology and treatment has passed from the side of desirability to the point of necessity. There was an understanding and the closest cooperation and harmony with the other services. This brought to the patients the best in specialized medical care and gave them the technical skill adapted to the various details of their cases.

This service was also called upon to make careful examinations and reach conclusions in cases of legal and moral responsibility. This brought the neuropsychiatric service in close contact with the judge advocate's department. A survey of the neuropsychiatric work shows that it is really an estimate of the man. A proper understanding of nervous and mental conditions requires a thorough physical examination, a careful study of laboratory findings, and consideration of all matters that may effect the intellectual, ethical, emotional, moral, or nervous status of the men. Not only does it estimate him as he is, but it must consider his relations with the past and his possibilities for the future. Thus is the neuropsychiatric service in close relationship with the enlistment of men, their morale, training, and education; with the question of mental hygiene, constructive psychology, and mental efficiency. As these matters enter into the great problems of the Army, so does neuropsychiatry become a basic element in the consideration of such questions.

Laboratory Service.

During the first half of the year the laboratory expanded to meet the increased demands. After March it occupied two temporary buildings designated for laboratory use; in addition there was an animal house of temporary construction. The mortuary and autopsy rooms are in a separate building, an excellent permanent structure.

The personnel was increased during the first half of the year. In July, 1919, there were 9 officers, 9 civilian employees, and 35 enlisted men on duty at the laboratory. After that time there was a gradual decrease. On December 31 laboratory force consisted of 1 medical officer, 3 Sanitary Corps officers, 4 civilian employees, and 13 enlisted men.

Over 80,000 examinations were made during the year, including special studies in meningitis and streptococcus infections. The laboratory performed all types of work such as is needed in a large hospital, including chemical examinations of the blood.

Occupational Therapy and Educational Service.

The fundamental aim of the work in this department is curative. The specific purpose is to help each patient to find himself and function again as a whole man, physically, socially, educationally, and economically: Physically, by helping to restore his body so far as possible to its normal condition; socially, by enabling him to feel that despite his physical handicap he may still be a self-reliant and

self-respecting member of the community; educationally, by furnishing him with such a training that he may make the most of his mental and physical resources and increase his personal efficiency; economically, by providing him a means of earning a comfortable livelihood, so that with his return to civil life he may be an economic asset instead of a liability.

The department of occupational therapy is divided into five sections—administrative, psychological and statistical, general or academic, technical, and recreational. The administrative department consists of the ordinary duties of a record and property office. The pshycological and statistical department has been primarily responsible for the psychological and educational surveys of individual patients. The academic or general department offers instruction from the most elementary grade through high school. The department has been particularly successful in reaching large numbers of patients who have not had the educational advantages and who have been desirous of taking advantage of courses which have required some academic background. The technical department comprises a wide variety of subjects, furnishing valuable instruction to the men who are mechanically inclined. The recreational department handles the formal exercise and play hours of the patients. In addition to indoor sports classes of dancing are included.

The activities of the department of occupational therapy and the educational service for the past year may be further divided into ward occupation, school and shop instruction, medical social service, and night-school instruction for men on duty at this post. The personnel has changed from military to civilian. In April it was made up of about 90 enlisted men and 75 aids, and on December 31, 1919, of 104 persons, practically all civilians.

The ward occupational department has charge of the work of 58 wards. At the end of the year the number of patients working was about 600 and was constantly increasing. The work assisted the surgeon and nurse in the physical and mental rehabilitation of the patient by means of handcrafts. As far as possible it has been planned to lead the patient toward educational or vocational training. The patient may chose any one of a dozen crafts. Each aid has kept an average of 8 crafts going and is qualified to teach the rudiments of 12 or 15 crafts.

In the schools and shops there were 15 educational and 40 vocational subjects offered. This work is entirely voluntary on the part of the patients, with the exception of some 9 per cent who were assigned to curative shopwork. Throughout the year the enrollment steadily increased as a result of the policy of giving those enrolled in the various activities of this department the opportunity of finding themselves in some form of educational work which would be of value to them. Approximately one-half of the assignments were vocational and the other half general academic and commercial. Each patient received personal attention in his individual problems in regard to vocation, and his case was carefully considered in order that he might study something which would be of definite value to him in the future. There were from 500 to 600 men enrolled in these courses. In all work special attention was given to attendance, making it as nearly as possible parallel to enrollment.

Physiotherapy Department.

The physiotherapy department covers the subjects of hydrotherapy electrotherapy, massage, and remedial exercises. Hydrotherapy consists of both local and general measures. Locally, the whirlpool baths, compresses, and contrast baths are used to stimulate the circulation and produce a state of hyperemia preparatory to giving massage. In the general treatments, the electrically-lighted cabinet is much used, either by prolonged use to produce profuse sweating as an eliminative treatment, or for a short time as preparative for the shower, needle bath, or Scott's douche. This form of treatment has proven especially beneficial in the rundown and mentally depressed. The tub baths have been used in head cases, neurasthenia, and the more or less excitable mental cases.

Electricity was used to determine the degree of paralysis in nerve injuries and as an aid in deciding whether an operation was indicated. The different forms were used to exercise the paralyzed limb or muscles, stimulate circulation, and maintain the nutrition and health of the patient. The electrical current was used for the softening and dissolving effect upon scar tissue, permitting the separation of bound-down structures, and for the heating effects in inflamed and stiffened joints. The static and high frequency currents were utilized both for their stimulative and sedative effects.

Massage has been almost universally used to aid circulation, keep the muscles soft and pliable and in an otherwise healthy condition, and to soften up scar tissue and break up adhesions. The massage work has been preventive as well as curative, as many cases have been taken soon after operation and the untoward changes prevented. However, the majority of cases have been undertaken late and after tissue formed and a limitation of movements in muscles and joints had taken place.

The department of measurements was taken over by the physiotherapy department from the occupational therapy department within the year. Before treatment is started in a case measurements are taken as to the range of motion in joints and muscles and the strength of injured limbs. Measurements are also taken at frequent intervals and recorded and charted to note progress. This department has been a great aid both to the physiotherapy and to the occupational therapy department in prescribing the proper treatment, exercises, and training.

In the gymnasium classes were held throughout the day for the correction of flat foot, training for walking with artificial limbs, heart, and empyema cases. Games and dancing classes were provided for the mental as well as other cases. In the warm months the large swimming pool, 83 by 33 feet, proved an attractive form of exercise.

LETTERMAN GENERAL HOSPITAL.

On January 1, 1919, there were 886 patients on sick report. There were 12,400 patients admitted during the year; 148 were transferred to other hospitals and 111 deaths occurred among patients in hospital. There were 13 deaths of cases not on sick report. There were remaining on sick report December 31, 1919, 1,033 patients. All these figures include officers, enlisted men, and civilians. The greatest number of patients on the records of the hospital during the calendar year was 1,852 on the date of August 7, 1919.

Personnel.

The personnel on duty at the hospital on January 1, 1919, consisted of 56 officers, 131 nurses, 137 civilian employees under jurisdiction of the Medical Department and 34 under jurisdiction of the Quartermaster Corps, 532 enlisted men of the Medical Department, 110 of the Quartermaster Corps, 2 Signal Corps, 13 Motor Transport Corps, and 1 Veterinary Corps. There were remaining on duty December 31, 1919, 80 officers, 130 nurses, 48 student nurses, 226 civilian employees under jurisdiction of the Medical Department, 55 under jurisdiction of the Quartermaster Corps, 461 enlisted men of the Medical Department, 109 Quartermaster Corps, 2 Signal Corps, and 2 Motor Transport Corps.

Up until about July, 1919, the commissioned personnel, with the exception of the commanding officer, consisted entirely of emergency officers. The frequent changes in the commissioned personnel during the year interfered considerably with efficient administration. The commissioned personnel on December 31 had reached a more or less permanent status, with consequent increase in efficiency. With the discharge of the emergency enlisted personnel, the hospital lost many valuable enlisted men, with resulting difficulties in proper administration. At the end of the year there still remained some 70 or 80 enlisted men of the "old Army," most of whom are eligible for furlough to the Reserve. Very few have expressed themselves as desiring to remain in the service.

Surgical Service.

general surgery.

The number of operations performed during the past year totals 3,280 on 3,012 patients, about 800 more than in the preceding year. There were only 22 deaths following operation; 3 of these occurred in very serious accident cases, practically moribund at time of operation. The total includes major and minor operations, which are of official record, but does not include dressings of accident wounds or trivial operations, records of which are kept only for hospital use.

The increased number of operations was due to the casualty cases of the World War, transferred to this hospital for definitive treatment and final disposition. The majority of these were bone cases, with a good percentage of nerve lesions. Complicated compound and comminuted fractures were usually infected. The infections had to be controlled and the wounds allowed to remain healed for a safe interval of time before further operative intervention could be attempted. This necessitated prolonged stay in hospital. A small number of cases of plastic maxillo-facial surgery was treated, with excellent functional and cosmetic results.

Mention should be made of the empyema cases received. Of 97 cases of empyema treated in this hospital during the year, 22 remained. Practically all had been operated primarily before entrance. Some have required from two to four operations; six were necessary in one case. It was estimated that, of the remaining 22, 10 would require further operative procedure. The most common cause of prolonged hospitalization has been the presence of bronchial fistula,

which did not permit of treatment by the Carrel-Dakin method; other cases are routinely treated with Dakin's solution. At intervals the cavities were measured, injected with bismuth in oil, and radiographed. When the physical condition of the patient was brought to the stage where operative intervention was permissible, the operation of choice was resection of ribs subperiosteally, over the cavity, and decortication. The mortality in empyema cases was 19 per cent.

In addition to war casualties, the service cared for the usual acute and chronic surgical conditions met with at all times.

ORTHOPEDIC.

The orthopedic section cared for about the usual run of war orthopedic cases, except that few very severe cases have been received, owing to the great distance from ports of debarkation.

Osteomyelitis following gunshot wounds was the main factor presented. The end results have been excellent, but a casual view of the cases during the last four months gave the impression that the same results might have been achieved in a shorter time, in many instances, by a more radical surgical procedure, with secondary closure after Dakin treatment. Primary amputations were very rare; secondary amputations were necessary in about the usual proportion of cases.

This section was very successful in giving amputation cases permanent artificial legs with end-bearing stumps. From a few reports received it is feared that these cases are being furnished with side-bearing limbs after they are discharged. If this should prove to be true, it will be most unfortunate, as they can not be satisfactory and involve an additional outlay. Whether this mistake is due to inexperience on the part of those under whose supervision these patients later come, or to the enthusiasm of artificial limb manfacturers for their own type of leg, is not known.

The subject of flat foot was given considerable individual attention, in an effort to return as many of these cases to duty as possible. Casts of the foot at rest were taken, and plates fitted to these casts; later the plates were altered from time to time in order to gradually bring the foot to its normal position. Various exercises were carried out daily in classes, in an effort to strengthen the appropriate muscles. The ultimate value of this work is doubtful, as so much depends on the mental attitude of the patient. However, it is considered to be necessary to make the effort, owing to the great number of recruits accepted for the Regular Army with abnormal feet.

NEURO-SURGERY.

This section had a most interesting series of cases involving the peripheral nerves, and the end results are very promising. Nerve section was performed when indicated, with suture in continuity whenever possible by freeing the nerve in both directions and flexion of the neighboring joints. Complicating ankyloses were more troublesome than the nerve lesions themselves, in limiting the ultimate amount of recovery, some being due to long immobilization and others to the omission of the proper physiotherapeutic measures during the earlier treatment. One case is of particular interest, in that nerve function

after complete paralysis is returning after a period of two and a half years without operation for nerve repair. This case was originally treated in a French hospital, and no data as to the amount of damage to the nerve at the time of injury are available.

EYE, EAR, NOSE, AND THROAT SECTION.

The work of this section has required the services of three medical officers, two of whom have devoted their time particularly to the care of the ear, nose, and throat cases, and the third to the care of the eye cases. During the greater part of the year two wards of 35 beds each have been devoted to the care of the enlisted patients. The officer patients have received hospital care in the officers' wards, and the women patients in the women's wards. A small room in connection with one of the first-mentioned wards has been used as an operating room exclusively for cases of this service. All tonsillectomies in children, submucous resections of the nasal septum, and other minor surgical procedures have been done in this room. Operations of a more serious nature, such as mastoidectomy and the various radical sinus operations, have been done in the main operating pavilion.

The eye, ear, nose, and throat clinic has occupied four rooms in the administration building. The clinic has been devoted to the care of ambulant patients in the main, those cases that have not required admission to the hospital. Two rooms have been used for the ear, nose, and throat cases, one for the eye cases, and the fourth as a reception room.

GENITO-URINARY SECTION.

On January 1, 1919, the cases coming within the scope of this department were confined to three wards. With the return of troops from overseas the number of cases has gradually increased until at the end of the year this service comprised five wards operating at full capacity and with approximately 200 patients. The greatest increase in admissions occurred from October to December, 1919, when venereal cases in large numbers were received in this country from Europe and distributed to the various hospitals throughout the United States.

In connection with this service there has always been maintained a department of urology, consisting of one ward of 15 beds with examination and treatment room adjoining. Consultation with the other departments of the hospital in suspected cases of kidney and bladder diseases proved of inestimable value. The work of this department has been supplemented by suitable laboratory and X-ray examinations, and many cases of doubtful diagnoses have been thus cleared up. Treatment of all kidney and bladder cases has been done by this department. There were an average number of 60 to 70 cystoscopic examinations monthly throughout the year. Total and differential function tests of the kidney have occupied a prominent place in the routine.

Officers' Wards.

On account of the large number of officer patients who have been treated during the year, ward facilities have been rather crowded, this being especially true during the first half of the year. Only two wards (about 60 beds) were available for all cases, both medical and surgical. During the last four months this condition was relieved by taking over certain barracks in the east cantonment of the Presidio of San Francisco, which were formerly used by the training camps. These barracks were utilized as wards for convalescent patients, both medical and surgical. This enabled all cases to be under closer supervision than if convalescent patients had been carried in quarters.

The professional services for officer patients were different from that of the enlisted personnel, for both medical and surgical were in the same ward. The surgical cases included those from the various divisions of surgery.

Women's Ward.

This ward is conducted as a mixed medical and surgical ward for the care of female patients, its capacity being 24 beds. As patients in this service come from a very wide territorial area—that is, from all the States bordering on the west coast—and as the ward is of small capacity, there is usually a waiting list. Of the 371 admissions during the year, 227 were surgical; 155 required operation. The total number of operative procedures was about 200, involving some 47 different types of operations.

Obstetrical Service.

For the first few months of 1919 the number of cases admitted made it necessary to use an inclosed porch, which provided a total bed capacity of 15. The work gradually decreased until the last months of the year it was possible to dispense with these extra beds, and return to the normal status of 9 beds, 6 in a ward and 3 in two small rooms.

Total number of admissions	158
Total number of confinements	121

Physiotherapy Department.

The work in this department was carried on in four sections—(1) gymnasium, (2) massage, (3) electrotherapy, (4) hydrotherapy.

(1) For gymnastic work one of the solaria is used. The space is so limited that class and drill work is impracticable, hence the activities of this section are confined to small "foot classes," muscle reeducation, special and general exercises with apparatus, and such massage and vibration as may be indicated in the individual cases.

(2) The massage section is in ward 15, in which massage as well as passive and resistive exercises are given. This work is well cared for by a force of trained reconstruction aides.

(3) The electrotherapy section is located in ward 12. This section has been far below par throughout the year by reason of lack of

proper equipment, but more especially because there has been no alternating current available. However, on December 31, it was working at its full capacity, after many months of comparative inactivity.

(4) The hydrotherapy section is in ward 17. This section is adequately equipped with dry, hot-air, and electric bath cabinets, needle, shower, douche, sitz, steam, and Nauheim baths. Two-arm and two-leg whirlpool baths have just been installed.

Medical Service.

ORGANIZATION.

The large number of medical cases handled by this service during the past year has permitted the grouping of cases for treatment into the following sections:

(*a*) Gastro-intestinal.
(*b*) Cardio-renal.
(*c*) Bones and joints.
(*d*) Pulmonary (nontubercular).
(*e*) Tuberculosis.
(*f*) Neurological.
(*g*) Psychiatric.
(*h*) Isolation.

PERSONNEL.

The personnel of the medical service, in common with other Army personnel during the past year, has been subjected to such frequent changes as to make an efficient organization difficult. There have been four chiefs of service and even more rapid shifting among the subordinate officers, nurses, and enlisted attendants. This condition will naturally rectify itself with more stable conditions.

FACILITIES.

The great expansion of the hospital under war conditions made necessary the erection of a large number of temporary wards, in which the majority of the medical cases have been treated, the permanent wards of the hospital having been allotted to the surgical service on account of their proximity to the operating rooms. These temporary wards are of the one-story pavilion type and have proven very satisfactory with the exception of the heating apparatus, which consists of a number of open-flame gas heaters along the sides of the ward.

EPIDEMICS.

There have been no general epidemics during the past year except the one of influenza which started during the fall of 1918 and continued until the latter part of January, 1919.

PSYCHIATRIC SERVICE.

This service has been extremely busy during the past year, especially during the second quarter, when there was a large number of psychiatric cases received from overseas. Recently large numbers of recruits have been handled by this service, a condition serving to emphasize the importance of psychological and psychiatric examinations of recruits before final acceptance for the Army.

Reconstruction and Educational Activities.

The reconstruction service of this hospital has given efficient cooperation to the medical service. This work has proved especially valuable in the neuro-psychiatric service. The results obtained with cases of psycho-neurosis and psychosis in the curative workshop have marked a distinct advance in the treatment of these cases.

EDUCATIONAL.

The work of the educational service was well under way on the 1st of January, 1919, having started at this hospital in July, 1918. There were approximately 365 subject enrollments at that date, with a gradual and very healthy increase in the number of men entering, until it attained a maximum of 2,415 subject enrollments during the month of August. In the early part of this year it was felt by the chief of the educational service that it was very necessary to get better cooperation and a more hearty response from the ward surgeons if the work was to attain its maximum value. With this in mind the chief of the educational service requested permission to address the medical staff at the hospital on the subject of occupational therapy. The response to this address was very noticeable.

In the early part of the year emphasis was being placed primarily upon ward work, as it was believed to be the opinion of those in authority that through this agency the chief therapeutic value could be attained. The ward craft work was very heartily received by patients and an increased demand for work of a semivocational nature was noticeable. The attractiveness of this kind of work had a tendency to hold men after they were able to take up work of a more practical nature. It was therefore necessary to issue certain orders limiting ward craft work.

The prohibitive expense connected with the ward craft work and the large personnel employed also demanded a tendency toward the more practical. This view was emphasized by the consultant who visited the hospital about the middle of the year, and who favored greater emphasis being placed on the academic and vocational work and toward work of a theoretical nature at the bedside.

The increase in attendance to vocational work in the shops and to academic work in the classrooms is to be credited largely to the fact that proper housing facilities for this kind of work were afforded sometime during March. Power machines for the various shop buildings were very hard to obtain, and it was rather late in the summer before the shops were properly under way. The curricula of the academic division and of the vocational division have been slowly added to and culled over.

RECREATIONAL.

Under the provisions of the program of recreational activities as outlined by the Surgeon General under date of December 6, 1918, the educational service undertook very active steps during this year to arrange recreational activities for patients and enlisted men of the duty detachment.

TRAINING OF DUTY PERSONNEL.

In compliance with directions from the War Department to establish vocational and educational work for men on duty at this hospital, it was felt to be advisable to make use of the facilities afforded by the educational service for training them to such an extent as would not interfere with occupational threapy. Applicants for training among the enlisted personnel on duty at this hospital have therefore been accepted by the educational service and at the present date 66 individuals are enrolled.

As a courtesy to the Federal Board for Vocational Education, a limited number of their trainees have been accepted for training in shoe repairing. In the opinion of the board the shop at this hospital was better provided with facilities for training in this branch than any other institution in this immediate vicinity.

PERSONNEL.

The personnel of the educational service on the 1st of January totaled approximately 50 persons. The commissioned and noncommissioned personnel has varied during the calendar year 1919 very considerably, only a few of those starting the work remaining. The civilian personnel, although added to materially during the year, has not been of such a variable nature. The total personnel at present numbers 113.

GENERAL HOSPITAL No. 6, FORT McPHERSON, GA.

Sanitation.

The sanitation of the post has been excellent throughout the year. The buildings are all screened, there is an excellent sewer system installed, the policing of the ground has been maintained in first class order, and no diseases which could be attributed to an unsanitary condition have occurred during the year.

Movement of the Sick.

Total number of cases treated during year 1919	13,083
Discharges on certificate of disability	2,746
Discharges under Circular 514, War Department, 1919	119
Total number of discharges	2,865
Deaths	79
Other dispositions	9,505
Remaining Dec. 31, 1919	634

Medical Service.

During the spring and summer months of 1919 there was an average of about 400 admissions per month to the medical service. About October, however, the number of admissions decreased, as most of the overseas patients had been returned. A large majority of the cases treated were chronic or suffering from slight disability. They were either discharged on certificate of disability or sent to some demobilization camp.

DIABETIC CASES.

A number of diabetic cases have been treated successfully, following the teachings of Allen and Joselyn. These cases have been used to teach our student nurses how to prepare diets for such cases.

VALVULAR HEART DISEASE.

A large number of cases of heart disease came to this hospital during the year 1919, the great preponderance being mitral insufficiencies.

INFLUENZA.

A few cases of so-called influenza, without complications, occurred during the early part of the year. Since the entire personnel of the post was vaccinated in the fall of 1918 with the pneumococcic vaccine supplied by the Surgeon General's Office and the streptococcic hemolyticus vaccine prepared in our own laboratory, the cases were very mild in character and without complications or deaths.

SCARLET FEVER.

During the month of January, 1919, a small epidemic of scarlet fever originated in the neuropsychiatric ward.

MENINGITIS.

There was no epidemic of meningitis during the year, but a few cases were sent in from time to time. The antimeningococcic serum was injected both intraspinally and intravenously, with splendid results.

PARATYPHOID FEVER.

During the latter part of August, 1919, a small and very mild epidemic of paratyphoid fever, type B, developed among the men at Fort McPherson and Camp Jesup. Altogether six cases were discovered and came under observation. Four of them originated in Fort McPherson and the other two at Camp Jesup.

DIPHTHERIA.

A few cases of diphtheria were brought into the hospital during the year, but by prompt isolation and prompt use of the antitoxin there were no serious results.

SMALLPOX.

Four cases of smallpox were admitted from other places.

TUBERCULOSIS.

A fairly large number of cases of tuberculosis were admitted from other places. As soon as a positive diagnosis was made, transfer was made to another hospital, unless the patient desired discharge on certificate of disability.

NEURO-PSYCHIATRIC SECTION.

The neuro-psychiatric department of this hospital comprised Wards U, V–1, V–2, V–3, and also 9 beds in Ward P for officers (each of the beds in Ward P being in a private room), making a total of 107 beds. The wards were of a type approved by the Surgeon General for the care of psychiatric and neurological cases. From January to August, 1919, inclusive, the great majority of cases were received from overseas. After that time the admissions were from sources principally within the geographical limits of the Southeastern Department. During November and December, 1919, an increasing percentage of admissions were from recently enlisted recruits, and were principally cases of defective mental development, hysteria, and dementia praecox.

There were 153 cases remaining in the neuro-psychiatric section on January 1, 1920. The greatest number of admissions in any one month was 173 cases in March, and the smallest number was 18 in December, 1919. There were five deaths in this section during the year 1919.

This section has availed itself of the opportunity granted by the reconstruction department of this hospital to instruct the patients in basketry, rug weaving, beadwork, hammock making, wood carving, etc. In addition to this, instruction was given by the reconstruction aids in reading, writing, and arithmetic. During the spring, summer, and autumn months a large number of the patients worked on the lawn and at gardening. The various forms of employment above mentioned were of very material assistance in maintaining discipline in the wards. The patients have manifested an unbelievable amount of interest in the work, and it is thought to have been of great therapeutic value in the treatment of the mental cases.

SURGICAL SERVICE.

PERSONNEL.

Upward of 130 officers were assigned to the surgical service during the year. Many of these officers have served at this hospital but a short time, having been sent here to await discharge.

The majority of the surgical cases have consisted of bone lesions (osteomyelitis), neuro-surgical lesions, orthopedic conditions, and empyema. The total number of cases operated on in the surgical service was 2,629. The number of deaths for the year in surgical service was 52. Of this number, 24 were due to disease and were not

operated on, 5 were due to railroad and other accidents, and 4 to anæsthesia. Two of these latter were in poor condition due to chronic osteomyelitis of femur following gunshot wound. The remaining 17 cases died after operation, a majority of them being bone cases. Forty-four cases were autopsied.

WOUND INFECTIONS.

Twelve operative cases that were classed as clean at the time of operation subsequently developed infection. In seven of these cases the infection was the result of residual infection in the old bone lesions and sinuses.

OSTEOMYELITIS.

In the majority of cases of osteomyelitis the active causative factor was found to be streptococcus hemolyticus or viridens. In the earlier cases of open treatment with Carrel-Dakin technique, a few healed sinuses, not interfered with at time of operations, later broke down and caused reinfection. This led to the practice of removing all apparently healed sinuses at the time of extirpation of active lesions.

NERVE INJURIES.

Of the peripheral nerve injuries, 353 cases were operative and 159 nonoperative. The number of cases requiring reoperation was 36. There was 1 death. Nine refused operation.

EYE, EAR, NOSE, AND THROAT.

The total number of examinations given were 14,523, divided as follows: Ear, nose, and throat cases, 9,132; eye cases, 5,391. The total number of operations performed was 482 (ear, nose, and throat, 284; eye, 198). Total number of refractions, including post-mydriatic, 1,238.

ORTHOPEDIC.

The shop has been hampered at times by lack of skilled labor. During the first half of the year the personnel was adequate and trained in their respective lines of work. After July 1 the enlisted personnel was constantly changing and it was most difficult to secure men who had the necessary ability for this class of work. The equipment was adequate and was kept replenished by the fund allowed from the Surgeon General's Office. A very large number of stock splints were altered and fitted. A large amount of time and labor was used in altering shoes.

EMPYEMA.

There were 188 cases treated during the year; of these, 129 were discharged cured. All cases were given a month's furlough and reexamined both clinically and X-ray before final discharge. Eight cases were discharged improved. Three were transferred. Forty cases remained under treatment on December 31. The policy pursued in the treatment of these cases has been to remove foreign bodies, diseased bone, and other sources of continuing infection; to secure

adequate mechanical drainage; to decorticate bound down lung tissue where necessary for expansion; to cause collapse of the chest wall where the lung could not be expanded; and to sterilize cavities by Carrel-Dakin treatment. Twelve cases were treated by the zinc chloride method. All were failures except one doubtful healed case.

Dental Service.

Realizing the great importance of a clean mouth as a primary asset to the medical and surgical treatment required, it was the rule to have all patients upon arriving report to the dental clinic for examination and classification. In this department particular attention was given to prophylaxis and the removal of foci of infection at the apices of roots. In extraction of teeth affected at apices (whether with novocain or under nitrous-oxide and oxygen) the sockets were thoroughly curetted. Great improvement resulted in the general condition of the patients in the majority of cases. The treatment of Vincent's angina and trench mouth by the use of 3 per cent zinc chloride in conjunction with salvarsan dissolved in glycerin was successful.

Reconstruction Service.

AGRICULTURE.

During the first half of the year the activities of the agricultural work were limited to auto trips to farms in the surrounding country. Noncommissioned officers were in charge of this phase of the work. There was, however, no organized course of studies, although a reading room was maintained in the agricultural building. A program was later mapped out, which provided for a curriculum embracing the following subjects: Crops and soils, fruits and gardening, farm management, animal husbandry, dairying, and poultry.

In connection with the agricultural work, a course in the practical operation, repair, and up-keep of tractors and farm machinery has been inaugurated.

MOTOR MECHANICS.

The automechanic department was housed in one entire building. The curative value of the work can scarcely be overemphasized, and noticeable results have been obtained in this connection. One of the instructors in the shop, an enlisted man, suffered the loss of his left arm while overseas, but he was able to render satisfactory service, and perform the ordinary duties incident to his position as instructor. His connection with the reconstruction work served as a morale factor in the work among other disabled soldiers.

CARPENTRY.

With the installation of workbenches, jig saws, pulleys, and other woodworking equipment in the school, an especial appeal was made to the patients interested in such work, and as a consequence additional enrollments were secured. The aims toward curative value in this phase on reconstruction service met with success in practically all instances. Lame arms, stiffened joints, and contracted muscles have

been given exercise as the patients manipulated the jig saws, hammers, augers, planes, and chisels. During the fall a number of the patients made cabinets, desks, and hall racks which when placed upon exhibit at the Southeastern Fair in Atlanta in October elicited wide comment and warm praise from the public.

PHOTOGRAPHY.

The photographic establishment of the reconstruction school, not altogether as popular as other subjects of study, has been of unusual benefit to the surgical service of the hospital in making pictures of the steps in treatment of gunshot wound cases.

ELECTRICITY.

Up to about July, 1919, only commercial telegraphy was being offered at this hospital, but with the arrival of an aid qualified to instruct in wireless telegraphy, equipment was placed in the latter part of July and within a few weeks the local station was able to communicate by wireless with Arlington and other stations off the southern coast.

PRINTING.

The printing shop of the school, equipped with three Gordon presses, and a Mergenthaler linotype machine, together with printing accessories, was able to meet the demands of the reconstruction service for folders, prospectus, outlines, posters, and items necessary in the operation of the clerical and record work of the division. In addition, a large amount of job printing was done for post headquarters, the quartermaster, and the utilities. A mimeographing section was maintained.

DRAWING.

Classes in mechanical and architectural designing and free-hand drawing and lettering have been maintained, but there has not been a very great demand for this kind of work.

COMMERCIAL AND BUSINESS COURSES.

The commercial department of the school, in charge of a curative workshop instructor in the bookkeeping section, and a head aid in the typewriting and stenographic section, was very successful in obtaining satisfying results. The touch method of typewriting was taught. Several systems of shorthand were offered. The bookkeeping work proved interesting to many students. Practice in the use of adding machines and comptometers was afforded.

A class in commercial law was organized and taught by the chief educational officer, which met with favor among the students and was well attended.

GENERAL EDUCATION.

The general or academic education division, under the direction of two head aids, met with merited success. Courses were offered in reading, English, composition work, French, penmanship (including left-hand writing), arithmetic, history, and mathematics.

HANDCRAFT WORK.

The main handcraft shop was established in August, 1919, but on December 31 it occupied a conveniently arranged room in reconstruction building 1157. All the handcraft work done prior to this time was carried on in the wards exclusively. It was seen that in order to enlarge the functions of the department it would be necessary to open a handcraft shop in the school. Weaving, dyeing, knitting, beadwork, jewelry making, carving, basketry, etc., were carried on in the shop, and the full curative value was obtained in practically every instance. The jewelry shop, perhaps one of the most popular places in the school building, was running for several months.

Department Laboratory.

The department laboratory functions under the jurisdiction of the commanding officer, General Hospital No. 6. At the beginning of the year the country was in the throes of an epidemic of influenza, and the principal work of the laboratory was the making of all varieties of examinations in respect to this disease, and preparing vaccines to be used as prophylactic measures in the effort to reduce the number of cases, as well as the complications.

GENERAL HOSPITAL NO. 41, FOX HILLS, N. Y.

At the beginning of the year 1919 there were 1,157 patients in the hospital, and during the year there were 8,637 admissions, and 7,224 dispositions, with 57 deaths.

Personnel.

OFFICERS AND ENLISTED MEN.

There was on duty at this hospital, December 31, 1918, 59 officers and 536 enlisted men, and on December 31, 1919, 92 officers and 498 enlisted men. When the temporary Medical Department men were released from the service the personnel was reduced about 25 per cent.

NURSES.

On January 1, 1919, there were 48 student nurses and 65 graduates on duty, and on January 1, 1920, 16 student nurses actually on duty at the hospital (129 student nurses were on duty at affiliating institutions) and 176 graduate nurses; 7 members of the Army Nurse Corps and 1 reserve nurse have been on transport duty, being carried as on

detached service. The first students to affiliate with other hospitals were assigned to those hospitals in May, 1919. Instruction to student nurses has occupied on an average of between seven and eight hours per week. This instruction has followed the curriculum for schools of nurses published by the committee on education.

Surgical Service.

During the year 1,507 operations were performed, 851 general anesthesias given, 734 of which were ether, 2 chloroform, and 117 nitrous oxide. There was also 361 administrations of local anesthesias. During July, 1919, there were 222 cases operated upon, which represents the greatest number for any one month during the year. In February there were only 15 operation cases, this being the lightest month. The personnel of the operating room has consisted of 8 nurses, Army Nurse Corps; 3 student nurses; and 6 Medical Department enlisted men. At times the personnel has been greater, these figures representing an average.

Educational Activities.

The educational service dates from April, 1919, with a personnel of 5 officers and 6 aids. A school for the instruction of patients was opened one month later. At the end of the year about 65 per cent of the total patient strength was being instructed by this department. The great majority of them were taught in the shops of the department, but a small percentage took craft work in the wards. It is estimated that 3,000 men received instruction in various classes of work. The personnel on December 31, 1919, was 5 officers, 77 aids, and 4 curative workshop instructors. The chief of this department ascertained the type of work that the soldier wished to follow after discharge and cooperated with the Federal Board as far as possible. He recommended in writing the type of work for which the soldier was best fitted. It is estimated that 500 cases were handled in this way.

GENERAL HOSPITAL NO. 28, FORT SHERIDAN, ILL.

Buildings.

This hospital on January 1, 1919, had 549 patients. At that time the hospital was occupying the old post hospital and the old barracks, which had been converted into hospital wards. The mess for the patients was being conducted in four small kitchens in the sections of the barracks that were previously used in preparing food for the troops quartered therein. All other buildings, with the exception of the cantonment built for the Reserve Officers' Training Corps and the buildings used for the supply department of the post of Fort Sheridan, were turned over for the use of the hospital; all officers' quarters, including two bachelor buildings, except for five sets of quarters in the first loop, were used for the housing of officers and nurses. The old Cavalry and Artillery stables were rapidly made over into barracks for the Medical Department detachment on duty at the hospital. The old riding hall was used as a garage.

All of the new buildings were turned over to the hospital during the months of February, March, and April. These new buildings comprised three ward blocks, two of which consisted of 4 two-story buildings each having a capacity of 225 patients; the third consisted of 5 two-story buildings, 3 with the same capacity; and 2 two-story buildings for communicable diseases. The other buildings were an administration building, laboratory building, surgical building, general mess, cold-storage building, fire station, power plant, and detachment mess building. Later the Red Cross constructed a headquarters building, convalescent house, and nurses' club building. The Young Women's Christian Association constructed a hostess house, and the Knights of Columbus and Young Men's Christian Association each had a clubhouse on the post.

Professional Services.

The work at this hospital has been general in character and all types of cases, both surgical and medical, with the exception of head surgery, were treated during this year. A large number of operations were performed and the work done was of an exceptional character from a professional standpoint. The total number of patients treated during the year was 17,870.

Detachment.

The detachment on January 1, 1919, consisted of 1,026 men. Most of these were temporary soldiers who were held in after the armistice was signed to care for the sick and wounded. They were gradually discharged when replaced or when the reduction of the number of enlisted men at this hospital was required. Effort was made to discharge by December 31 all of these temporary men except those who desired to remain longer in the service. This plan was not entirely accomplished. A number of such soldiers still remained in the service, but arrangements had been made to discharge them shortly after the 1st of January, 1920. The detachment consisted of 776 men on December 31. In addition to their regular duties in the hospital, the detachment was compelled to perform the necessary guard and fatigue for the reservation. These men performed their duties in an exceptionally cheerful and thorough manner, and there were very few complaints in regard to their behavior.

Educational and Recreational Activities.

The educational department conducted courses in 66 subjects and was generally very successful. On December 31 the patients were so imbued with the importance of this work that the attendance upon the classes was high, averaging about 68 per cent.

The recreational activities were, until November 1, under the control of the welfare organizations, including the Red Cross. An entertainment of some character was given every evening at the post gymnasium. Since November 1 this work has been carried on by the educational and recreational officer, assisted by the Red Cross. It has been satisfactory and a very high class of entertainment has been provided throughout the year. Athletics among both patients

and detachment men were encouraged throughout the year. Base-ball, football, and basket-ball teams were organized, and played a large number of games. Two bathhouses and the necessary equipment were placed on the beach, and a large number of men availed themselves of the opportunity for swimming which was provided by the proximity of Lake Michigan. The general welfare of the patients and other enlisted men on the reservation received a great deal of attention during the year, and at the present time two enlisted men's clubs exist; one, composed of patients, occupies the old Young Men's Christian Association building; the other, consisting of men on duty at the hospital, will shortly move into the building previously occupied by the Knights of Columbus.

On December 31, 1919, the hospital had space and equipment for the accommodation of 4,300 patients.

GENERAL HOSPITAL NO. 2, FORT McHENRY, MD.

Surgical Service.

The great majority of cases treated in this hospital were general surgical cases, most of them, however, being of the long-standing, chronic type which had been transferred here from other hospitals. For the most part very satisfactory results have been obtained.

NEURO-SURGICAL SERVICE.

The total number of cases treated during the year of 1919 in this department was approximately 725, of which 600 were peripheral nerve cases, the remainder being head and spinal cord cases. During the year there were 190 peripheral nerve cases operated upon. In addition, there were about 600 consultations.

OTO-NASO-LARYNGOLOGICAL SERVICE.

During the year there were 926 patients treated in the wards. Out-patient clinic treatments and consultations numbered 8,377. The total number of operations done on this service were 533. The most frequent lesions met with were those of the accessory nasal sinuses, usually post-influenzal; some followed gassing, and a few resulted from high explosives and other war injuries. There were a large number of ear infections, principally of the chronic supperative type, with a very low percentage of mastoid involvement. Few cases of acute mastoiditis were found for such a large clientele. Acute tonsillitis was frequent, with a number of cases of peri-tonsillar abscesses and a few cases of Vincent's angina. There were three severe laryngeal cases, with stenosis of the larynx, two of which followed gunshot wounds and one a self-inflicted wound.

EYE SERVICE.

The number of cases treated in the eye clinic was 9,611. The total number of refractions was, approximately, 800.

GENITO-URINARY SERVICE.

The total number of cases treated in this department number 676, which included 357 transferred from other hospitals during the months of October and November. The majority of the cases treated were gonococcus infections. All cases of syphilis received arsphenamine by intravenous method. Six hundred and nineteen treatments have been administered and no serious reactions resulted.

MEASUREMENT DEPARTMENT.

The department was for the purpose of measuring in degrees the range of voluntary movements in stiff joints; also, the measuring in pounds the strength of voluntary movements in stiff joints. The instruments were designed from the various forms of apparatus that were placed in other hospitals. In addition, further modifications and improvements have been devised.

PHYSIO-THERAPY.

The large majority of patients who received physio-therapy had gunshot wounds which caused injury to bones, muscles, or nerves. The average patient received a local whirlpool bath or electrical baking to stimulate and make flexible the part affected. The muscles were then thoroughly massaged, and stiffened joints carefully given exercise, passive, active, or resistive.

THE REPOSITORIUM.

This department was established for the purpose of centralizing the responsibility for the care of records of operations performed at this hospital and further stimulating medical interest in the cases under treatment. The records were made by means of charcoal and pen and ink drawings, plaster casts, wax models, photographs, X-ray prints, model splints, and pathological specimens. Two very interesting exhibits were held in connection with the repositorium, one at Atlantic City during the week of the medical conference there in June and the other later in the summer at the Medical and Chirurgical Building in Baltimore. Both exhibits were extremely successful, proving very interesting to the medical profession and the laity alike.

ROENTGENOLOGY.

Of the number of patients admitted to this hospital, 4,884 reported to the X-ray laboratory for examination, an average of 33.4 per cent. Total number of pathological cases 3,508, or 71.8 per cent of the 4,884 patients examined; total number of fracture cases 2,068, or 58.9 per cent of the 3,508 pathological cases. The photographic laboratory connected with this department photographed 746 patients, for which 2,338 plates are on file.

ORTHOPEDIC SERVICE.

In this department practically all the joint and tendon work was done and all mechanical appliances were also made.

Medical Service.

GENERAL MEDICAL SERVICE.

This service treated such cases as trench fever, trench foot, trench mouth, scabies, pediculosis, the various organic heart conditions, the disorders of the heart due to the effect of gas, and the effects of gas with manifestations of the nervous system, and the so-called shell shock. Arthritic conditions due to exposure formed a very large group of cases which were directly traceable to war conditions. A moderate number of irritable hearts and cases of nephritis completed the list of strictly war-time maladies. The most active part of this service, however, was concerned with the care of acute infectious diseases. There were only a few cases of diphtheria. Meningitis and pulmonary tuberculosis were less in evidence, if anything, than one would expect to find in civil life. The greatest number of cases in the medical service at any one time was approximately 500.

NEURO-PSYCHIATRY.

The patients admitted during the year presented almost every variety of nervous and mental disorders. The number of cases treated in this department was 328.

GENERAL HOSPITAL, FORT BAYARD, N. MEX.

During the year 1919 many improvements and additions to this hospital were completed. The new water supply, obtained from springs in the hills back of the post, which was turned into the mains in October, 1918, has been ample at all times for the needs of the post and is of the highest quality. The laundry has been completed, making it possible to do all of the laundry work at the post instead of sending more than half of it to civilian laundries, as has been necessary in the past.

Marked improvement in the quality of the milk produced by the hospital dairy has been obtained. At the present time milk of certified grade is furnished patients and personnel. One of the most valuable and recent studies of the laboratory has been on the subject of milk analysis. The milk furnished by the hospital dairy is now examined so very frequently (twice weekly) that close check and supervision is obtained, and this has shown its value in the most marked general improvement in the dairy, which is now producing milk averaging above the certified standard.

The farms have become more and more important to the hospital because of the increasing prices for articles of subsistence. Practically all of the beef furnished patients' messes has come from the hospital's range cattle, and recently veal as well. Large amounts of vegetables and fruits have also been furnished the messes from the gardens and orchards. A chicken ranch has been started which furnishes fresh eggs to all the sicker patients in the hospital. The hog farm has added materially to the income of the hospital fund, but it has not as yet been considered practicable to furnish the pork, ham, and bacon.

The movement of patients during 1919 was as follows:

Remaining Dec. 31, 1918		1,363
Admitted during the year		2,102
Total		3,465
Disposed of during the year:		
To duty	842	
Died	129	
Discharged on certificate of disability	645	
Deserted	13	
Discharged, expiration term service	50	
Transferred to insane asylums	2	
Transferred	640	
Otherwise disposed of	563	
Total		2,884
Remaining Dec. 31, 1919		581

The professional work has been hampered to a certain extent by the many shifts in personnel, resulting from discharges and transfers. In the past two months this factor has not been so troublesome. There have been three chiefs of the medical service, two of the laboratory service, three of the surgical service, two of the eye, ear, nose, and throat service, and two of the X-ray service. There have also been three chiefs of the reconstruction division.

Medical Service.

As this hospital is devoted to the treatment of tuberculosis, the medical service is naturally the most important one, and all other services are considered subservient to it. During the past few months the chief of the medical service has to a large extent supervised all of the professional work in the hospital.

Surgical Service.

Much of the surgical work done has consisted of minor operations and dressings, the number of major operations being comparatively small.

GENITO-URINARY SERVICE.

This service has been handled by the same personnel as the surgical service. Sixty-eight cases of gonorrhea, 46 active and 22 chronic, were treated during the year. Most of these cases come from the duty personnel. Fifty-nine cases were given treatment for syphilis; of this number, 38 were completed, 17 disposed of not completed, and 4 were remaining at the end of the year. The majority of these cases denied infection and were given treatment because of laboratory findings.

X-RAY DEPARTMENT.

The major part of the work of this department is chest work. All cases suspected of tuberculosis are given an X-ray examination of the chest on admission as a part of the routine laboratory work; stereoscopic plates are taken when the lesions are small or doubtful.

Routine X-ray plates of the head have been taken on admission and turned over to the dental department for use when the cases come up for examination.

EYE, EAR, NOSE, AND THROAT SERVICE.

This department has handled routine examinations and treatment of eye, ear, nose, and throat cases during the year. The facilities for this work have been considerably improved through the fitting up of a well-equipped and convenient office in ambulant ward 3 to replace the unwieldy system whereby, up to October, eye work had been done in one building and ear, nose, and throat work in another.

Reconstruction Division.

Courses have been given during the year in English, romance languages, stenography, typewriting, bookkeeping, commercial law, accounting, music, automobile work (both theoretical and practical), telegraphy, electricity, carpentry, trunk making, farming, printing, and crafts (including leather and metal work and jewelry), etc. All these branches were taught in the schools and shops. Occupational work was taught in the wards by reconstruction aids. A ward worker was placed in each ward.

Physical Exercise.

Graduated exercise was started for tuberculous patients in the month of July. Those who had reached such a stage in the cure that no evident change in their condition could be observed for some time were given a course of exercises. A 15-minute walk was the preliminary effort, and examination was made immediately upon its completion. After a stated period, usually about 1 month, exercise was increased to 30 minutes per day; and if improvement followed, the length of time was increased steadily. Calisthenic exercises were also used. When it was found that either form of exercise was beneficial, the patient was assigned to definite work, the amount per day being graduated according to his ability to react. Each patient taking test work or exercise is examined weekly for weight temperature, pulse, and general condition.

Laboratory Service.

The work for the year has embraced the usual routine of work of the active clinical laboratory. The special function of the hospital as a tuberculous sanatorium has called for a rather large amount of laboratory work pertaining to that special branch. As an example, the sputa reports for the year alone total close to 70,000. The routine work has included Wassermann reactions on every patient admitted to hospital. If this policy is continued, valuable statistical information will be obtained. Post-mortems have been performed on the great majority of the cases ending fatally, and histological and photographic studies made. Many exceptionally interesting and valuable gross specimens have been saved, most of which have been forwarded to the Army Medical Museum at Washington, D. C.

GENERAL HOSPITAL NO. 19, OTEEN, N. C.

At the beginning of 1919 this hospital had 1,003 patients. During the calendar year 1919, 2,348 patients were admitted. The disposition of these was as follows:

Discharged	1,144
Transferred, etc	472
Returned to duty	1,482
Deaths during year	247
Remaining in hospital Jan. 1, 1920	907

Besides the necessary continuance of professional treatment of tuberculous patients, the work of this hospital was largely that of reorganization. This has included (*a*) comprehensive classification of patients with a view to systematizing treatment, particularly rest; (*b*) physical grouping of patients; (*c*) decentralization of messing arrangements.

Food being such an important factor in the treatment of pulmonary tuberculosis, it was deemed highly desirable (and the results have justified such action) to feed separate classes of patients from their own ward kitchens, and above all to have the patients as near the kitchen as practicable. If the patient can not be taken to the kitchen, the kitchen must be taken to the patient. This regrouping and decentralizing of kitchens has necessitated a considerable amount of construction and alteration in buildings.

The policy was developed of attempting to occupy as completely as possible the time of the patients while under treatment. It was also the endeavor to reduce the number of passes granted patients for leaving the reservation, as no control could be exercised over them while absent. The distance from Asheville, the nearest point of entertainment, made the trip a tiring one. Therefore the entertainment of patients while out of the ward, and also the men of the duty detachment, was planned on as generous a scale as possible. For the patients, an entertainment of some kind was given every day in the week in the evening at the Red Cross building. Naturally only ambulatory cases could go there. For infirmary cases confined to bed, moving pictures were taken into the wards with portable machines, and other forms of entertainment were given them to hold their interest.

At one time about 300 colored patients were under treatment here. An ambulatory ward was altered and used as a colored hostess house, where they and their friends were made to feel at home. Entertainments were given there, moving pictures, games, etc.

Post Utilities.

LAUNDRY.

The laundry washes 4,500 pieces daily. Its activities now provide facilities for everybody on the post.

ROADS.

The main road in the post is a concrete one, running from the entrance of the reservation to about the middle of it. The other roads have been made into tar-bound macadam, with practically

no more dust from them than from the concrete road. Through Federal and county projects the post is now connected both with Azalea railway station, 1½ miles to the east and 1 mile to the west, with the main concrete road to Asheville by an asphaltum road.

GARDEN.

Such land as was available was utilized for the hospital gardens. Hogs and chickens are to be raised. About 30 hogs, 10 of them registered Berkshires, are now owned by the mess. It is planned to feed all waste to hogs owned by the hospital.

RECONSTRUCTION.

VOCATIONAL AND OCCUPATIONAL THERAPY.

Work of this character is prescribed for the patients by the ward surgeons. Reconstruction activities are most valuable in occupying the patients' time and attention, and if not overdone are an important stimulus to the morale and mental attitude.

PROFESSIONAL INSTRUCTION.

When demobilization began it was immediately seen that the specialists who had composed a larger part of the staff of this hospital could not be held and their places could not be filled with trained men. To maintain as far as possible the efficiency of the staff, a course of instruction was immediately planned and put into effect. This provided that all medical officers reporting for duty would take a short course, under the specialists who remained on the staff, in such subjects as physical diagnosis and the hospital methods in vogue here. This program was actually carried out with much benefit to the service, inasmuch as a large percentage of the officers relieving the regular staff were not expert in the treatment of pulmonary tuberculosis.

GENERAL INSTRUCTION ON TUBERCULOSIS.

Information concerning tuberculosis, particularly the after treatment of arrested cases, was given all classes of personnel on duty here. This included enlisted men of the Medical Department, nurses, and aids, and instruction was even given to the families and friends of patients temporarily here. The benefits of this action was soon seen by the readiness with which the more or less severe regulations governing the rest and control of all patients were accepted by all concerned.

All patients in this hospital have been placed in five classes:

Class A.—Comprises cases who have remained inactive for a minimum of 60 days, these cases being under observation for discharge and should have a minimum rest of 9 hours daily.

Class B.—Comprises such cases as have been inactive for 30 days and should have a minimum of 11 hours rest in bed daily, including hours from 1 to 3 p. m.

Class C.—Comprises cases with an occasional afternoon fever and no morning fever and such active cases without fever as require this rest. They should have at least 12 hours in bed.

Class D–2.—Comprises cases running a regular afternoon fever and no morning fever and such other cases as require additional rest; 16 hours minimum rest in bed daily.

Class D–1.—Comprises cases running a morning and afternoon fever, and such other active cases as in the judgment of the ward surgeon as require 24 hours rest in bed daily.

Patients having been placed in one of the above classes are transferred to a ward designated to handle such cases exclusively.

GENERAL HOSPITAL NO. 21, DENVER, COLO.

This hospital, which is located 8 miles east of the city of Denver, entered the year far from complete. Though it had been open for patients for three months, the work was performed under the difficulties always encountered in attempting to administer a hospital during the construction period. During the year the buildings, approximately 100 in number, were finished, a large amount of equipment was secured, and heating plants and installation of wiring were completed.

The professional work of the hospital is divided into medical, surgical, and laboratory services. Of these the medical service is by far the most extensive, inasmuch as the primary object of this hospital is the treatment of pulmonary tuberculosis. For the same reason the X-ray service, which normally is a part of the surgical service, has here been placed directly under the medical.

The hospital is divided into an infirmary section and an ambulant section. One section of the infirmary wards is devoted entirely to the care of the very sick cases which include those with advanced lesions, high fever, and grave prognosis. Another section is devoted to the moderately sick patients, while a third handles semiambulant cases not quite ready for the outside wards.

About the 1st of June, a part of one section of the infirmary (that for moderately sick) was set aside to be used as a receiving ward from which incoming patients were classified. One or more of our ablest diagnosticians were always assigned to it. Many of the patients in the infirmary wards are bed cases and none of them in condition to justify much exercise. Consequently these wards are equipped with diet kitchens, steam tables, etc., and the majority were fed in the wards.

When the outside wards were completed, patients not requiring infirmary treatment were transferred to them until in August a bed occupancy of over 1,300 was reached.

On August 1 a series of lectures and talks to patients on personal hygiene and tuberculosis and its complications, and the advantages of sanatorium over home treatment, were inaugurated. Lectures were illustrated with lantern slides, and the illiterate patients have comprehended them. Definite rules for the treatment of tuberculosis and its complications were formulated.

A school of instruction for the training of officers in clinical tuberculosis, diagnostic methods, and bedside management was established.

During the year a total of approximately 76,500 examinations were made in the laboratory, including all routine analysis, blood and chemical tests, zoological, hystological, and bacteriological examinations. In addition, this service had charge of all autopsies, preparation and inspection of bodies, etc.

Surgical Service.

GENERAL SURGERY.

The general surgical service was necessarily the smallest in this hospital, this class of work being chiefly incidental.

DENTAL SERVICE.

The dental service, which was by far the largest of the surgical services, naturally had a large personnel, there being five dental surgeons who are assisted by several patients officers. The average number of patients in the hospital for the year was approximately 1,200, with about 500 duty men, 150 nurses, and 80 educational service workers, all of whom have been treated. A dental survey was made of all patients and necessary treatments promptly given. The importance of focal infection was particularly stressed in the work of the dental service during the year. Lack of resistance and the lowered vitality of patients lead to a more careful examination as to the possibilities of focal infection arising in the mouth. Encouraging results were secured through elimination of infection from the mouth. Approximately 10 per cent of patients treated showed positive laboratory findings for Vincent's angina.

Educational Service.

This service was inaugurated in June, 1919, with a staff of 23 and an enrollment of 73. It was not until April, however, that equipment was secured and the complete staff organized. This work was both curative and educational. The first class was considered of more importance, since with patients long bedridden any useful occupation which will take men away from themselves, prevent morbid thoughts, and tend to create a contented mental condition is so essential in the progress of tuberculosis. In the infirmary wards, crafts and academics were taught, the work being carried on at other than rest hours. While this instruction was not believed to have much practical value from an educational standpoint, it undoubtedly is a valuable therapeutic measure. With ambulatory patients more can be done along practical educational lines. There was a gratifying increase in the percentage of enrollment during the last month of the year, approximately 60 per cent of all patients being enrolled in some branch of the work.

Mess Department.

Though the finances were consolidated in the general mess fund, the following distinct messes were operated: General mess, patient officers' mess, nurses' mess, and detachment mess. In addition

there were operated a mess for duty officers, which was entirely distinct from the others. Early in the year 1919 much unfavorable criticism was directed toward the messes of this hospital. While no doubt in some instances criticisms were justified, it is believed that considering the then very limited facilities for messing large organizations, the totally inadequate equipment, the small ration allowance, and the untrained personnel, the conditions were as good as could be expected. No single department of the hospital received a greater amount of attention. In an institution of this kind complaints will inevitably be made. It is characteristic of tuberculosis, that patients are discontented and inclined to grumble at everything that is done for them. This condition has been fostered no doubt by overzealous, oversympathetic hero worshipers from the city of Denver. These people, though with the best of intentions, too readily lend an ear to childish complaints of patients and perhaps unintentionally encourage them to believe the complaints are justified.

GENERAL HOSPITAL NO. 20, WHIPPLE BARRACKS, ARIZ.

This was a 500-bed hospital prepared for the treatment of cases of pulmonary tuberculosis, situated in a beautiful location in northern Arizona completely surrounded by hills and 1 mile north of the city of Prescott. The Santa Fe Railroad runs through the post. The hospital was opened at Whipple Barracks in May, 1918, and the construction of new hospital buildings of hollow tile and stucco was begun at that time. Early in the spring of 1919 the hospital was completed and the equipment completely installed. The hospital was abandoned by the Army in February, 1920, and was turned over to the United States Public Health Service. In general, for the year 1919 General Hospital No. 20 was successfully operated as an Army tuberculosis hospital. The patients were at all times well cared for. Complete laboratory and X-ray examinations were made and recorded for each patient and appropriate treatment instituted.

Medical Service.

The medical service comprises practically the entire hospital. During 1919 1,068 patients were admitted to the hospital. In the first six months of 1919 131 patients were discharged under the provisions of War Department Circular No. 188 upon the request of relatives, and in the last six months 126 were so discharged. Two hundred and eighty-two were discharged as having reached their maximum improvement. Twenty-five patients died during the year.

The treatment consisted of rest, fresh air, proper food, heliotherapy, and in many cases artificial pneumothorax. Artificial pneumothorax was very frequently employed with no bad effects, with many astonishingly good results, and in general with a high degree of success.

Surgical Service.

Comparatively few operations were performed. There were no deaths on the Surgical Service.

X-RAY.

One thousand three hundred and sixty-one chest plates were taken during the year and 357 fluoroscopic examinations made. As a routine measure, an X-ray examination was made of every patient on admission and before discharge. Other examinations were made as deemed necessary.

LABORATORY.

The pathological laboratory was prepared to perform all ordinary work, including Wassermann tests. A routine Wassermann serum reaction was made on every patient upon admission, together with a complete examination of blood, urine, and feces. Ten consecutive sputum examinations were made on every patient each month unless tubercle bacilli were found, in which case they are discontinued until the following month.

Dental Service.

Two thousand three hundred and ten dental treatments were performed. All new patients and all other personnel were examined shortly after their arrival.

Mess Department.

The question of properly prepared food was a great problem at this hospital. All food was cooked by enlisted cooks under the supervision of the mess officer and dietitian. The dietitian prepared all menus and a properly balanced ration was at all times indicated on them. However, many of the cooks have been cooks in name only. They were emergency enlisted or drafted men anxious, during the entire year, for their discharge when no replacements were available for them. Under the circumstances, the food served was as well prepared as possible and in the main was satisfactory. The ration allowance during the last few months of 1919 was inadequate to supply tuberculous patients with proper food. Proper food, however, was at all times obtained and the cash deficiency supplied from the hospital fund of the Surgeon General's Office.

Post Laundry.

After July 14, 1919, the steam laundry was complete in practically all respects. This laundry has taken care of all hospital and personal laundry in a satisfactory manner and at a great financial saving to the post.

Educational Service.

A complete educational and reconstruction service was in operation during the entire year. This included bedside work, shop work, and class work in various subjects. There was at all times a large enrollment of patients.

The problem of properly instructing recruits and in providing means for them to take advantage of educational opportunities held

out to them upon their enlistment seems to be a very serious one in the Medical Department and especially so at hospitals. It is impossible at a hospital for men on duty to be excused in the afternoon for class work unless approximately 50 per cent additional personnel over and above the actual number needed is supplied.

GENERAL HOSPITAL NO. 43, NATIONAL SOLDIER'S HOME, VIRGINIA.

This hospital was officially opened May 1, 1919, but did not actually begin to functionate as General Hospital No. 43 until May 3, 1919. Prior to becoming a general hospital it had been serving as Debarkation Hospital No. 51 for seven months. During the first two months after officially ceasing to be a debarkation hospital it handled a certain number of cases for the port of Newport News when the hospitals at that port could not accommodate the number of patients arriving from overseas.

The hospital being designated to care for mental cases only, it is obvious that the neuro-psychiatric service embraces the greater proportion of the professional work, but to provide adequate medical and surgical service for the patients, it was necessary to continue a medical, a surgical (including genito-urinary and ear, eye, nose, and throat department), and dental services. A laboratory and a hydrotherapeutic department were also organized and equipped.

Neuro-psychiatric Service.

This institution was originally the National Soldier's Home, and not being built for mental cases there were no standard wards. The barrack dormitories which were used as wards varied in capacity from 35 to 200 beds. In some of the barracks there was installed the necessary screening for doors and windows to insure the retention of the irresponsible cases. Continuous baths were placed in three buildings for the treatment of excitable cases who required frequent and continuous baths to control their psychotic episodes. There were 22 wards in all, 8 of which were operated as closed wards. It was the policy to give the patients as much freedom as possible, and many kept in closed wards at night were paroled during the day.

Psychiatric Service.

TREATMENT.

The continuous sedative baths, hot packs, Scott's douches, needle showers, electric heat, occupational therapy, and exercise have been used to avoid narcotic and sedative drugs. The latter have very seldom been used, and then only for temporary relief of excitable or nervous patients, at times when it was not feasible to resort to the bath or pack. Probably drugs were not used in more than half a dozen instances during the period covered by this report. The restraint sheet was practically never used.

The more excitable cases were segregated in the wards provided with the continuous baths, and the results in these cases were very gratifying. There was no instance where a patient could not be

quieted by the use of the hot pack or continuous bath if applied judiciously and if the treatment was repeated at frequent intervals. They seldom objected to this treatment and many were glad to return to the baths.

OCCUPATIONAL THERAPY.

This did much to establish confidence in the patient. The prime factor in such work is to obtain the gradual cooperation of the patient in order not to put him at a task that will be repulsive, and thereby make him worse. There was close cooperation between the ward surgeon and the reconstruction aids. The helpless and irresponsible patients were coaxed to work in the wards. They began with simple tasks such as the winding of string, the unraveling of burlap, basketry, rug weaving, knitting, etc. As each one regained his confidence and the control of his faculties and acquired more responsibility, he was allowed to perform a different class of work requiring more physical and mental ability such as carpenter work, printing, typewriting, and automobile repairing.

EXERCISE AND RECREATION.

Through this medium the patient's physical condition was kept as near normal as possible. Exercise was also useful in stimulating a desire for food. Care was taken in the selection and grouping of patients for the different exercises, giving them all the benefit of open air during the day. The less responsible were taken on walks while the others were required to take variated calisthenic movements. Through the Red Cross and other civilian organizations many automobile rides were arranged for the patients. The granting of furloughs was very liberal when the condition warranted. In many instances a visit home has unquestionably benefited the soldier.

The commanding officer reports that the staff has been impressed with the large number of mental cases that have been diagnosed as dementia praecox, presenting typical histories of mental deterioration, and which later had their mental faculties return almost to normal and were discharged as cured or improved to such an extent that they could be released on their own responsibility. These were instances of cases of depressions of mixed type which could not be differentiated from dementia praecox until they had been under observation for some time. There were also many cases which developed after the armistice was signed, conditions which could not be accounted for unless the etiological factor was purely anxiety and nostalgia. Many of these soldiers who had gone through the worst of the fighting and were apparently normal a long while after the armistice, later became confused and were sent to hospitals for mental observation. Frequently they had actually returned to this country and were in the demobilization centers before they had their psychotic episodes. There have been a few cases that were difficult to diagnose in persons who drank heavily in France, but who had been men of exemplary habits in civil life. In these cases it has been the problem to decide whether their psychosis was of alcoholic origin or whether the soldier had become a victim of mental deterioration

before he had begun to indulge in alcoholic debauches. The commanding officer also says:

There is another matter worth some consideration and that is the great number of mental deficients (morons) who have enlisted since the armistice, whose condition certainly could have been disclosed at the time they entered the service if they had been examined by a person familiar with mental diseases. It is very evident that the men are not kept under observation long enough at the recruiting depots to enable a psychiatrist to examine them, or else the examinations have not been thorough. Many of these soldiers have been sent to France as replacement troops and many of them have been returned within 30 days after their arrival, having the psychotic episodes or else having exhibited evidence that they did not possess sufficient intelligence to become a soldier.

This statement is made with due consideration of the tendency to send all soldiers who do not get along well in the company and all men who are absent without leave or get drunk to a hospital for mental observation. There have been some who were returned to the States that, no doubt, could have performed the duties of a soldier satisfactorily and should have been disciplined, but such cases are in the minority.

Hydrotherapy Department.

This service offers nothing of importance to report. Thirty-six beds were set aside for the surgical cases, and this number was always adequate.

Genito-urinary Service.

This service has been operated as a part of the surgical service. It offered nothing of importance to report. A ward of 16 beds was set for these cases, and this was always adequate.

Ear, Eye, Nose, and Throat Department.

The department has served a very useful purpose, as many patients with somatic complaints have been relieved, cured, or pacified by the nasal spray while quite a few have been treated for pathological conditions.

Medical Service.

The medical service was organized with a view of treating such ailments as might develop among the mental patients and members of the hospital staff. A suitable isolation ward was equipped and beds set aside for other medical cases.

Laboratory.

The laboratory did all the work for this hospital, as well as the technical procedures for the posts and cantonments located in this district. After the middle of October Wassermann tests were done on all cases in the hospital. Complete cerebrospinal fluid examinations were made in all cases with suspicious histories or clinical findings and in cases showing a positive Wassermann as the only index to a possible syphilitic disease. In examination of the spinal fluid, a cell count and globulin determination by both Ross-Jones and Pandy methods were done. Wassermann and colloidal gold reactions are also performed.

BASE HOSPITAL, FORT SAM HOUSTON, TEX.

The base hospital is rated as 1,200-bed capacity. Crisis expansion would raise it to about 2,700 beds. This would necessitate the quartering of the Hospital Corps men in tents or barracks elsewhere than in the hospital proper. On December 31, 1918, there were about 2,200 beds available. In order to accommodate as large a sick report as 2,700 beds it would be necessary to utilize the porches.

The actual number of patients accommodated during the year varied from 768 on January 1, 1919, to 1,471 on July 10, 1919, and diminished again to 612 on December 31. A large number of overseas cases passed through the hospital. The greatest number at any one time was about 600.

The general medical and surgical work embraced practically all phases of these departments. The main operating room was busy almost every morning, and from three to four major operations were usually performed daily, except on Saturday and Sunday.

Medical Service.

NEUROPSYCHIATRIC DEPARTMENT.

This is well equipped, and has very cheerful wards. The service has been large and satisfactorily handled. In connection with this department, the manual work, such as basket making and clay modeling, etc., was largely used. Music played an important part both in the entertainment and the treatment.

X-RAY DEPARTMENT.

This is very well equipped, and has done a large amount of work. Its scope included everything that usually is done in this department, including treatment.

PHYSIO-THERAPY DEPARTMENT.

This has been extensively developed, and has been very largely used by all other departments of the hospital. Very satisfactory results were obtained in the post-nerve injuries, the various forms of stiff joints, muscles bound down by scar tissue, and in the so-called rheumatic cases.

Surgical Service.

GENERAL SURGERY.

Some very creditable work was done in repairing of joints. A number of completely ankylosed elbows were successfully operated upon, and almost perfect motion restored. The nerve surgery was also quite successful in many cases.

GENITO-URINARY.

This department has been very busy as such a department usually is in a large hospital. In addition to the ordinary run of venereal cases, a considerable amount of interesting kidney surgery was done.

Women's Ward.

A well-equipped department for women is maintained. One ward took care of the medical and surgical cases, with another ward being specialized for obstetrical work.

Educational and Recreational Activities.

EDUCATIONAL.

A very complete school was maintained in connection with the hospital, for the reeducation of men who were unable to resume their usual occupations after finishing their hospital treatment, and also to train men during their stages of convalescence. This school taught nearly every ordinary subject from primary reading, writing, and arithmetic to advanced training for expert accountants. Bookkeeping was successfully taught. Among the mechanical trades, the automobile mechanics, tire repairing, leather work, and carpentry seemed to be the most popular. Electricity was also successfully taught, but the attendance was not great in this department. During the summer large classes were taught the rudiments of farming, and went out to the surrounding country to see the various ranches in actual operation. A number of men have left the hospital to secure lucrative positions, including those of moving-picture operators, car repairers, etc., having learned the trade in this hospital.

ENTERTAINMENT.

Other activities for the entertainment and instruction of the corps men and nurses, as well as the patients were carried on.

Unsatisfactory Character of Recruits.

A great deal of unnecessary work was brought upon this hospital by a large influx of physically and mentally unfit recruits. These have been culled from practically every organization in and around this neighborhood, and are frequently men who have been in the service but a few days when they are found to be entirely unfit for duty. This is believed to be largely due to the eagerness of the recruiting service to get the men, regardless of their quality, either physically or mentally. In this number were numerous epileptics, insane men who had been discharged once or twice before as unfit, men with flat feet, and men of general worthlessness. As it sometimes takes a number of days or even weeks to determine the mental status of a man, this is a great loss to the Government, both in time and money.

BASE HOSPITAL, FORT BLISS, TEX.

During the year this hospital provided treatment for troops stationed at Fort Bliss, Tex., in the vicinity of El Paso, Tex., and in the entire El Paso district. There was a total admission to this hospital of 5,377 patients.

Professional Services.

The work of this hospital in 1919 was divided into the surgical, medical, X-ray, dental, and laboratory services.

SURGERY.

The surgical service comprised the major operating service; eye, ear, nose, and throat service; venereal and out-patient service. There were performed 671 major and minor operations; 52,787 dressings and treatments were administered. There were 11 deaths in this service, 3 of which were postoperative; 8 were unoperated, having entered the hospital in such conditions that operations were not indicated. The latter cases were, as a rule, gunshot wounds of the chest.

VENEREAL DISEASES.

A central venereal clinic was instituted and treated all venereal diseases in this district. Unless it was a case where the patient had open lesions of syphilis or operative treatment was indicated, he was not admitted to the hospital, but was treated as an out-patient. There was a total of 60,000 treatments.

PSYCHIATRIC DEPARTMENT.

The psychiatric department occupied two wards, neither of which was very satisfactory. One of them was also used as a detention ward. Mental cases requiring restraint were placed in this ward. During the year 161 cases were cared for. The majority of them were different types of dementia praecox.

DENTAL DEPARTMENT.

The dental department is now called the "Central dental clinic" and does practically all of the dental work of this district. A dental survey was made of all patients admitted to this hospital, particularly tuberculous patients.

ARMY AND NAVY GENERAL HOSPITAL, HOT SPRINGS, ARK.

Admissions.

The total number of admissions during the period covered by this report was 1,253. They were distributed as follows:

Army and Navy (officers and enlisted men)	936
Civilians (honorably discharged soldiers and sailors of the Army, Navy, and Marine Corps, and civilians)	317
Total admissions	1,253
Daily average number treated in hospital	160.2
Dispositions:	
Returned to duty	634
Died	5
Discharged on surgeon's certificate of disability	137
Transferred to other hospitals	22
Otherwise disposed of (civilians left hospital, etc.)	456
Total dispositions	1,254
Remaining in hospital Dec. 31, 1919	144

DEPARTMENT HOSPITAL, MANILA, P. I.

Movements of the Sick.

	Officers and enlisted men.	Philippine Scouts.	All others.	Total.
ADMISSIONS.				
Command	131	3	18	152
Transfer	221	48	49	318
Otherwise	587	284	843	1,714
Remaining, 1918	48	6	51	105
Total	987	341	961	2,289
DISPOSITIONS.				
Duty	802	281	47	1,130
Died	3	5	34	42
Discharged on certificate of disability	1	39	0	40
Transferred to Letterman General Hospital	76	0	9	85
Transferred to other hospitals	48	2	14	64
Otherwise disposed of	0	0	816	816
Remaining 1919	57	14	41	112
Total	987	341	961	2,289

GENERAL HOSPITAL NO. 31, CARLISLE, PA.

Although the hospital organization was started in September, 1918, only 24 so-called "shell-shock" cases were admitted by January 1, 1919. Other patients did not begin to arrive until February.

During the current year the institution proved to be a well-balanced general hospital. The buildings, with few alterations and no new construction, were found well adapted for hospital purposes.

The number of patients admitted to the hospital was: Domestic, 769; overseas, 3,700; total, 4,469. There are remaining at the end of the year 595.

Four deaths occurred on the surgical side (none as the result of surgical interference) and 5 on the medical side. Only 2 cases of pneumonia developed. These were both of type 4, mild, and made prompt recoveries. The number of cases of acute infectious diseases was small. Those giving most trouble have been Vincent's angina (chiefly of the gums), mumps, and sore throat due to the hemolytic streptococcus. Sixteen cases of erysipelas occurred in surgical wounds; all of those made prompt and satisfactory recoveries.

The surgical service (including sections of head surgery, radiography, and urology) functioned in a satisfactory manner. Results of surgical operations were unusually good, although the many cases of osteomyelitis required numerous operations and relapses were frequent. Bone-grafting operations transferred from other hospitals showed a high percentage of unsuccessful results; of 19 such cases recently studied, but 5 were successful. Infections of operation wounds have been very few; in fact, none have occurred for many months.

Physio-therapy was actively conducted after March. There were 707 patients treated, with a total of nearly 75,000 treatments. The results showed clearly the great value of these procedures in the types of cases chiefly met with here, namely, late results of gunshot and other injuries.

The educational service never fully lived up to its opportunities. These opportunities are exceptional, when fully availed of by an active campaign, looking to the inclusion of all convalescent patients. While the large majority of patients were enrolled for educational work, no practicable method was devised to hold their interest and to require their attendance. This hospital had a splendid shop equipment, located in a large building which is thoroughly adapted to the work. Facilities here probably far exceed those at any other institution. At the close of the year a gratifying improvement was being manifested.

The mess conducted for patients and their attendants experienced many vicissitudes owing to the faulty equipment taken over with the Indian school, and the untrained personnel resulting from discharges and recruitment. However, in general the service was satisfactory.

Recreational activities for patients and hospital personnel were always well conducted and no day passed without an attractive program. The hospital was fortunate in having a fine auditorium which seats 1,000, a large library, a fine athletic field with grandstand, a large building for dances, receptions, and indoor athletics, and various other recreational facilities.

The institution has two farms aggregating about 275 acres, most of which are under cultivation. These farms furnish the bulk of the milk required for the hospital, a large amount of pork, many varieties of vegetables in season, and food for the stock. The farm showed a gain of over $15,000 for the year.

ARMY MEDICAL SCHOOL.

Instruction of Officers.

The twenty-fourth session began October 1, 1919, and ended May 28, 1920. Thirty-one accepted candidates, who were members of the Medical Reserve Corps, were ordered to the school for the course of instruction. All of them were recommended for commission in the Regular Establishment. However, three of them were discharged from the service upon their own application, before receiving their commissions, four resigned after being commissioned but before graduation, and one was ordered to Oteen, N. C., for observation and treatment. Seventeen officers of the regular Medical Corps were also ordered to the school. Of this number four resigned and one was retired for physical disability before the completion of the course. Thirty-five student officers completed the course. Thirty were found proficient and were awarded certificates of graduation. One officer of the Philippines National Guard attended the session, was found proficient, and awarded a certificate of graduation.

UNDERGRADUATE COURSE OF INSTRUCTION.

Laboratory.—Value of subject: Maximum, 2,000; minimum, 1,600. Three hundred and twenty-eight hours were devoted to it. It was given by one professor and four assistant professors. For student officers it covered a period of eight months, and was modeled after the courses given before the war, with the exception that additional instruction was given in pathology and in food and nutrition.

Bacteriology: The instruction has not materially changed from that given in previous years, but more emphasis has been laid on the organisms causing respiratory

diseases. In the next few years more detailed instruction will be given on the pneumococcus, meningococcus, and influenza bacillus.

Pathology: Instruction in this study was given, for the first time, the course lasting one month. It included the study of gross specimens from the Army Medical Museum, the examination of microscopic sections, the performance of autopsies, and illustrated lectures. It proved satisfactory and will be continued.

Serology: This work was continued practically as in the previous years. Work on the blood groups has been developed.

Hygiene and preventive medicine: The instruction in these subjects was incidental to that given in other branches, in view of the fact that the students already had practical experience in this subject and also because the relation of the curriculum in this school to that of the field school had not yet been determined.

Food and Nutrition: This course began, for the first time, in January, 1920. It consisted of 14 hours of lecture work and 40 hours of laboratory work. The subjects covered were metabolism, the source and methods of manufacture of food materials, food inspection, sanitation of kitchens and mess halls, the nutritive value of food products, the feeding of troops and patients, the treatment and prevention of diseases due to deficient or defective diet, food analysis, blood analysis, and air analysis.

Ophthalmology and otology.—Value of subject: Maximum, 500; minimum, 400. This course was divided during the session into two parts; the first included the study of the anatomy, physiology, and diseases of the eye, and the anatomy, physiology, and diseases of the ear; the second division consisted of a course in optics, retinoscopy, ophthalmoscopy, and refraction. One hundred and forty-two hours were given to the instruction.

Military surgery.—Value of subject: Maximum, 800; minimum, 640. This course was given at the Walter Reed General Hospital and was subdivided as follows, and 176 hours were devoted to it.

1. Individual instruction in the application of Carrel-Dakin technique, and individual application of Carrel-Dakin technique, by the student, on war wounds.
2. Individual instruction in the diagnosis of brain and peripheral nerve injuries.
3. Practical demonstration in the treatment of gunshot fractures of long bones, which included the application of modern traction and transportation splints.
4. Practical demonstrations of the application of maxillo-facial splints.
5. Practical instruction in construction of fitting of artificial limbs and braces.
6. Individual bedside instruction in diagnosis, treatment, and post-operative treatment of surgical cases.
7. Individual instruction in operative surgery in the operating room. Special operations such as herniotomies and appendectomies were performed by the student under the direction of instructor.
8. Practical instruction in cystoscopy, urology, skin diseases, and venereal diseases.
9. A complete course of lectures on military surgery.

Medical Department administration.—Value of subject: Maximum, 1,000; minimum, 800. It included Army regulations, changes in regulations, the Manual for the Medical Department, general order bulletins, circulars, and special regulations. Practical demonstrations were given from time to time in the Purchase, Storage, and Traffic system of handling of property as it relates to the Medical Department, by a medical officer on duty with the purchase, storage, and traffic division. Practical instruction was also given in medical supply depot work by the officer in charge. The number of hours devoted to the subject was 58.

Clinical medicine.—Value of subject: Maximum, 800; minimum, 400. This course was given to the student officers of the Army Medical School this year at the Walter Reed General Hospital, Tokoma Park, D. C., because of the excellent clinical advantages the hospital afforded. Seventy-five hours were devoted to the subject.

Roentgenology.—Value of subject: Maximum, 500; minimum, 400. The student officers in this class received a course which was divided into 3½ months of technique and 3½ months of plate interpretation, much time was spent in taking radiographs of normal patients, in practicing localization of foreign bodies, and in operating the portable (field) X-ray apparatus.

Sanitary chemistry.—Value of subject: Maximum, 500; minimum, 400. The time devoted to the instruction of this subject was spent largely in the laboratory, but a portion was given to lectures and to a trip to Fort Myer, Va., to study the water plant at the military post. There were 123 hours devoted to the subject.

Sanitary tactics.—Value of subject: Maximum, 500; minimum, 400. This course embraced instruction in three subjects: Field service regulations, map reading, and sanitary drill. These subjects were covered in weekly periods of 3½ hours. In addition, the standard setting-up exercises were given on three mornings each week or periods of 20 minutes.

GRADUATION EXERCISES.

Graduation exercises were held Friday afternoon, May 28, 1920, in the auditorium of the New National Museum. The diplomas were presented to the graduates by Hon. Newton D. Baker, Secretary of War. The Hoff memorial medal was presented to Maj. Seymour C. Schwartz, Medical Corps, United States Army, by the Surgeon General of the Army, Maj. Gen. Merritte W. Ireland; the Sternberg medal was presented to First Lieut. August J. Pacini, Medical Corps, United States Army, by Col. Richard Olee, United States Army, the founder and donor of this medal; the Skinner medal was presented to First Lieut. William O. Callaway, Medical Corps, United States Army, by Lieut. Col. Percy L. Jones, Medical Corps, United States Army, adjutant of the Army Medical School, in the absence of the founder and donor, Maj. John O. Skinner, United States Army, retired.

The honor graduates of the session follow in the order of their standing in class: Maj. Seymour C. Schwartz, Medical Corps, United States Army; First Lieut. Rufus L. Holt, Medical Corps, United States Army; First Lieut. Gordon A. Clapp, Medical Corps, United States Army; First Lieut. William H. ReMine, Medical Corps, United States Army.

The twenty-fifth session of the school will commence on or about October 1, 1920.

POSTGRADUATE COURSE OF INSTRUCTION IN ROENTGENOLOGY.

One lieutenant colonel, one major, three captains, and four first lieutenants, Medical Corps, were ordered to the school for a postgraduate course in roentgenology. The lack of roentgenologists in the regular Medical Corps and the need for them in the X-ray laboratories of the large Army hospitals in this country after the discharge of the temporary roentgenologists created a demand for this course. The duration of the course was 12 weeks, divided into three periods of 4 weeks each. X-ray physics was taught the first 4 weeks. Beginning with the fifth week the class was divided into two divisions. Each division alternately received instruction in elementary roentgenology by practical work in the X-ray laboratories, one at the school and one at Walter Reed General Hospital.

Instruction of Enlisted Men.

Enlisted men of the Medical Department, some of whom were sent here for the purpose and others taken from the enlisted personnel already on duty at the school, were given training in laboratory technique, as follows:

Bacteriological.—Three classes were instructed during the year in bacteriological laboratory technique. Seventy-five men attended these classes, 25 of whom qualified as expert technicians and were sent to the various laboratories for duty in that capacity. The other 50 qualified as laboratory assistants. The subjects included in the course were: Study of weights and measures; preparation of stains; preparation of various media; care of animals; methods of staining bacteria; cultural characteristics of the common nonpathogenic organisms, as well as staphylococcus, streptococcus, pneumococcus, colon, and typhoid; preparation of pathological specimens for shipment; preparation of specimens from the human subject; and urine analysis.

Chemical.—Three classes were also given instruction in elementary chemistry 15 hours a week for 8 weeks.

X-ray.—Four classes were given instruction in X-ray technique. Fifty-two attended these classes and 29 graduated. The demand for X-ray technicians in the hospitals and camps throughout the country was very great and at no time was the supply of graduates sufficient to satisfy this need. Every effort was made to train and send out as large a number as possible, with the object continually in mind to graduate only efficient and careful technicians.

General Activities.

This report would be incomplete if it did not include a summary of the activities in which the Army Medical School is engaged aside from its functions as a teaching institution. Briefly, these activities are summarized under the various heads as follows:

LABORATORY DEPARTMENT.

The functions of the laboratory department are as follows:

1. Instruction of medical officers and enlisted men in the theory and technique of laboratory methods for the treatment and prevention of diseases in the Army.
2. Investigation of these diseases with the object of better control.
3. Routine examinations of specimens.
4. Examinations of supplies and apparatus with a view to their adoption or rejection for the service.
5. The manufacture of prophylactic vaccines and other biological products.

The work is divided among the following laboratories: Bacteriological, pathological, serological, chemical, food and nutrition, and veterinary. Seventeen officers comprise the commissioned personnel on duty in these laboratories. Investigations have been carried out in the several departments. The investigation of apparatus for the service is assuming considerable proportions; samples submitted with bids are examined, as well as new devices.

The typhoid vaccine department is running satisfactorily on the reorganized plan. This department is still supplying all of the typhoid-paratyphoid vaccines used by the Army, Navy, Public Health Service, Agriculture Department, and other Government bureaus. There have been manufactured and issued for use during the past year over 1,650,000 doses of triple typhoid saline vaccine.

Approximately 250,000 doses of pneumococcus vaccine have been manufactured and distributed. Some of this vacine has been used in laboratory experimental work in the Massachusetts State hospital with favorable results.

In addition to the routine analyses, such as urinalyses, of which there were over 7,000 made during the year in the chemical laboratory this laboratory has prepared standards for calorimetric determination of hydrogen-ion concentration, and distributed them to the various Army laboratories.

The routine work of the food and nutrition laboratory consisted in the determination of the nutritive value of certain foods by animal feeding, work in metabolism, food analysis, blood analysis, and air analysis.

X-RAY DEPARTMENT.

The X-ray laboratory, formerly housed in the main building at 462 Louisiana Avenue and partly in the annex at 472 Louisiana Avenue, has during the past year been installed as a unit at 472 Louisiana Avenue. As now arranged the X-ray department clinic consists of seven rooms. Instruction for X-ray technicians is carried on in a large, well-lighted laboratory, containing an experimental table, where simple procedures in elementary electrophysics are demonstrated, and two complete instruction X-ray machines with all the wiring simplified and exposed. In addition to this there is a dark room accommodating 14 students for training in the development of X-ray plates. There is an exposure room equipped with a Kelly-Koett machine, a Campbell machine, and a bedside machine. A workshop is maintained for the purpose of the repair and maintenance of X-ray equipment, for experimental work, for the manufacture of new devices, and for the preparation of apparatus for the instruction of officers and men.

In addition to the instruction of officers and enlisted men in roentgenology, there has been an active clinic maintained for the X-ray examination of patients referred here from the attending surgeon's office in Washington, the examining boards, and other places. Not infrequently selected cases are also sent from the Walter Reed Hospital for some particular form of examination. A few cases have also been sent from camps or hospitals in other parts of the country. A summary of this work shows that during the past year there were 2,190 examinations.

PHYSICAL EXAMINATION DEPARTMENT.

Physical examinations made by the permanent members of the physical examining board during the year reached approximately 8,000. At the beginning of the year there were six members on the board, but in April, 1919, this number was reduced to two.

MIMEOGRAPHING DEPARTMENT.

This department is an important one. During the year the total number of prints made was approximately 900,000, including 5,000 sheets of examination questions. The preparing of these questions involves the folding of these sheets and the sealing of envelopes containing them. This department is operated by one civilian clerk.

PROPERTY DEPARTMENT.

This department, as heretofore, has been a very active one. The purchase of all supplies, such as materials necessary for the manufacture of vaccines, glassware, animals, feed for animals, lumber for the manufacture of shipping boxes and crates, stationery, and office supplies, is a part of the work of this department. The shipment of vaccines and laboratory supplies to the various Army posts, camps, and laboratories, is also taken care of by it. Vouchers for the payment of these purchases and the necessary invoices for shipments entail exacting clerical work and much correspondence. During the past year vouchers approximating $50,000 have been prepared and forwarded for settlement.

Enlisted and Civilian Personnel.

ENLISTED.

Strength of detachment July 1, 1919	157
Strength of detachment June 30, 1920	177

CIVILIAN.

At the beginning of the past fiscal year there were on duty at the Army Medical School five civilian clerks other than the chief clerk.

REMARKS AND RECOMMENDATIONS.

An appropriation having been secured for a building to house the Army Medical School and to be located at the Walter Reed Hospital reservation, it is hoped that the work may be completed and the school transferred to its new home in time to open there the session of 1922–23. Until that time the present quarters will suffice for its needs and for the laboratories, all of which have important functions beyond that of instruction.

A plan for the establishment of a school for the Veterinary Corps should be prepared. The present veterinary laboratory at this school should be used as a beginning and a few veterinarians trained here until the scheme of instruction can be developed either at the Walter Reed Medical Center or at the Carlisle Field Service Medical Center. The present accommodations are insufficient for the further expansion of veterinary instruction.

The remarks made in the preceding paragraph apply equally to the Dental Corps. Arrangements have been made for a limited number of dental officers to study dental bacteriology in the laboratories. No time should be lost in preparing an outline for a dental school to be established at the Walter Reed Medical Center.

The course of instruction during the coming session will last from November 1 until June 1. The graduates will be recommended for a course at the Carlisle Service Medical School during the summer of 1921. Hereafter newly appointed medical officers should receive the basic course at Carlisle first and enter this institution from there.

The instruction during the next session will be entirely technical and clinical, in the laboratory and at the bedside. The subjects of Medical Department administration, sanitary tactics, and drill will be omitted, being reserved for Carlisle School. The whole vast subject of military hygiene should be divided between the two schools. Carlisle should teach hygiene of troops, personal hygiene, and field sanitation; the Army Medical School the technical side of preventive medicine, bacteriology, parasitology, and epidemiology.

Five students from Spanish-American Republics have been accepted for the coming session, and places have been reserved for 5 medical officers of the National Guard. It is recommended that 60 officers appointed this year from civil life without previous military experience or from among former temporary medical officers who have qualified for the regular Medical Corps be detailed for instruction, making in all a class of 70, which is about the capacity of the laboratories.

STATISTICAL TABLES.

TABLE I.—*Arms of service, enlisted men in the United States, 1919—Diseases only.*

Arm of service.	Admissions.	Deaths.	Discharges.	Days.
Artillery	17,306	214	1,445	596,556
Aviation	14,395	152	745	296,860
Cavalry	8,104	62	407	176,348
Engineers	5,672	96	1,062	272,268
Infantry	66,278	848	8,074	2,315,339
Medical	36,485	240	2,704	775,364
Ordnance	5,246	58	494	111.815
Quartermaster	50,468	571	3,993	1,167,583
Signal Corps	3,077	44	294	175,046
Tanks	423	6	37	39,522
Others	31,843	271	4,560	553,188
Total	239,297	2,562	23,815	6,479,889

TABLE II.—*Arm of service, enlisted men, United States Army in Europe—Diseases only.*

Arm of service.	Admissions.	Deaths.	Discharges.	Days.
Artillery	23,665	520	812	761,740
Aviation	7,503	107	271	234,547
Cavalry	1,525	20	56	46,795
Engineers	27,410	543	994	889,457
Infantry	85,480	1,604	3,540	2,866,821
Medical	30,358	294	923	841,209
Ordnance	3,248	38	118	84,178
Quartermaster	50,808	912	1,699	1,543,483
Signal Corps	5,388	100	169	161,510
Tanks	745	7	28	24,839
Others	26,212	410	1,111	982,532
Total	262,142	4,555	9,721	8,437,111

TABLE III.—*Admissions from disease, States of occurrence (excluding large camps), enlisted men in the United States, 1919—Absolute numbers and ratios per 1,000.*

States.	Number.	Ratio.	States.	Number.	Ratio.
Colorado	2,467	1,598.83	Virginia	11,933	694.02
Iowa	622	1,303.98	Michigan	1,098	684.96
Wyoming	1,032	1,285.18	Washington	1,763	680.17
Pennsylvania	2,486	1,152.53	New Mexico	3,249	676.73
Arkansas	565	1,146.04	New Jersey	14,826	659.87
Indiana	1,464	1,089.39	Massachusetts	1,293	656.01
Connecticut	234	1,035.40	South Dakota	7	636.36
Illinois	3,013	1,024.48	Delaware	283	631.70
Tennessee	242	983.74	Texas	17,126	604.65
Mississippi	135	900.00	Rhode Island	323	593.75
Maryland	6,330	898.90	Maine	420	561.40
Minnesota	567	895.74	Arizona	3,373	558.63
Georgia	5,715	883.58	West Virginia	94	549.71
Florida	1,259	850.10	Kansas	1,789	539.50
Missouri	1,458	845.22	Oklahoma	2,375	514.40
District of Columbia	3,370	835.61	Vermont	165	507.69
Nebraska	878	827.52	Oregon	167	492.62
New York	15,239	819.70	Montana	61	448.53
Alabama	739	801.52	Wisconsin	23	310.81
Louisiana	578	800.55	Alaska	163	249.23
Kentucky	2,354	792.59	Others	15	65.79
Ohio	1,911	779.36	Nevada	1	.....
South Carolina	896	779.13	North Dakota	2	.....
Utah	499	744.78	Idaho	2	.....
New Hampshire	125	739.64			
North Carolina	1,347	725.75	Total	123,647	729.37
California	7,571	715.60			

TABLE IV.—*Admissions from disease, States of occurrence (excluding large camps), enlisted men in the United States, by months, 1919—Absolute numbers.*

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Alabama	259	106	71	12	19	25	34	70	59	37	27	16	4	739
Alaska	17	13	4	14	14	16	9	8	13	13	19	23	.....	163
Arizona	674	349	436	227	214	202	139	293	272	201	159	202	5	3,373
Arkansas	161	91	71	27	25	21	40	61	35	14	13	5	1	565
California	1,176	710	666	551	519	512	575	704	561	575	518	488	16	7,571
Colorado	287	217	183	215	209	190	169	204	181	196	195	220	1	2,467
Connecticut	56	20	24	23	19	32	21	27	1	.....	.....	.....	11	234
Delaware	62	57	41	22	9	8	16	11	16	15	7	19	.....	283
District of Columbia	801	499	358	196	187	169	195	192	211	169	186	205	2	3,370
Florida	550	80	73	53	54	66	51	72	84	52	55	68	1	1,259
Georgia	991	656	620	511	416	382	353	323	303	326	377	345	112	5,715
Idaho	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	2
Illinois	467	380	481	287	274	211	175	180	141	107	105	96	109	3,013
Indiana	350	152	129	95	64	120	157	118	52	49	87	75	16	1,464
Iowa	64	53	90	61	58	94	76	46	44	20	5	11	.....	622
Kansas	453	359	306	123	72	69	55	60	73	66	75	68	1	1,789
Kentucky	756	404	170	123	115	89	107	145	93	105	126	121	.....	2,354
Louisiana	122	48	36	26	43	26	33	23	44	34	45	97	1	578
Maine	110	64	67	13	17	13	23	15	21	25	27	25	.....	420
Maryland	1,632	1,275	789	323	189	185	279	378	395	326	167	302	90	6,330
Massachusetts	232	180	225	166	106	78	41	41	33	66	35	64	26	1,293
Michigan	341	171	181	112	59	63	51	20	14	27	12	24	23	1,098
Minnesota	135	99	81	58	56	42	16	16	16	13	8	20	7	567
Mississippi	82	11	13	2	8	4	5	2	2	1	2	1	2	135
Missouri	122	102	100	120	127	143	146	131	93	113	78	172	11	1,458
Montana	12	27	9	2	5	.....	2	1	.....	1	.....	2	.....	61
Nebraska	231	115	70	32	23	15	27	19	43	108	96	99	.....	878
Nevada	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
New Hampshire	26	11	17	18	11	6	9	4	9	1	4	9	.....	125
New Jersey	2,901	2,384	2,159	1,710	1,223	836	1,075	806	630	477	196	266	163	14,826
New Mexico	447	386	367	252	234	169	202	325	236	249	151	129	102	3,249
New York	3,028	2,318	2,334	1,620	1,346	1,137	917	617	542	420	391	397	172	15,239
North Carolina	318	237	141	147	125	72	52	52	47	42	42	52	20	1,347
North Dakota	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	2
Ohio	517	387	185	103	108	76	53	78	101	83	106	114	.....	1,911
Oklahoma	654	362	306	142	179	131	160	109	74	85	88	84	1	2,375
Oregon	92	14	13	9	10	6	3	4	5	4	3	4	.....	167
Pennsylvania	779	533	384	177	128	110	67	77	43	62	54	68	4	2,486
Rhode Island	84	47	68	23	11	8	18	11	14	17	13	9	.....	323
South Carolina	165	162	218	124	60	52	44	37	12	15	6	.....	1	896
South Dakota	.....	4	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	7
Tennessee	60	41	55	2	2	6	6	17	7	12	19	15	.....	242
Texas	3,329	2,107	1,640	1,195	1,002	1,044	1,053	1,208	1,264	1,151	1,009	1,011	113	17,126
Utah	83	52	68	42	32	22	25	31	13	30	35	65	1	499
Vermont	33	21	5	4	4	.....	11	14	18	23	20	12	.....	165
Virginia	2,708	1,993	1,638	995	977	1,048	839	469	363	287	252	194	170	11,933
Washington	966	212	147	85	58	44	38	35	54	40	27	56	1	1,763
West Virginia	32	29	11	5	2	3	4	1	.....	.....	7	.....	.....	94
Wisconsin	.....	11	2	4	1	3	.....	.....	.....	2	.....	.....	.....	23
Wyoming	26	30	81	175	119	151	155	115	69	25	38	48	.....	1,032
Others	2	1	1	.....	2	1	2	2	1	2	.....	.....	1	15
Total	26,393	17,581	15,135	10,228	8,537	7,702	7,528	7,181	6,302	5,686	4,885	5,301	1,188	123,647

TABLE V.—*Deaths from diseases, States of occurrence (excluding large camps), enlisted men in the United States, 1919 (excluding deaths from remaining cases, 1918)—Absolute numbers and ratios per 1,000.*

States.	Number.	Ratio.	States.	Number.	Ratio.
South Dakota	1	90.91	Maine	3	4.01
Connecticut	11	48.67	Georgia	25	3.87
South Carolina	35	30.43	Michigan	6	3.74
Wisconsin	2	27.03	Rhode Island	2	3.68
Washington	61	23.53	Arizona	22	3.64
North Carolina	34	18.32	California	37	3.50
Oregon	6	17.70	Texas	94	3.32
Minnesota	9	14.22	Alaska	2	3.06
Mississippi	2	13.33	Kentucky	9	3.03
Colorado	14	9.07	Kansas	8	2.41
District of Columbia	34	8.43	Missouri	4	2.32
New York	156	8.39	Delaware	1	2.23
Indiana	11	8.03	Alabama	2	2.17
Pennsylvania	17	7.88	Utah	1	1.49
Illinois	23	7.82	Oklahoma	6	1.30
Louisiana	5	6.93	Arkansas	.....	.....
New Mexico	32	6.67	Idaho	1	.....
Maryland	46	6.53	Montana	.....	.....
Iowa	3	6.29	Nevada	.....	.....
New Jersey	140	6.23	New Hampshire	.....	.....
Wyoming	5	6.23	North Dakota	.....	.....
Nebraska	6	5.66	Vermont	.....	.....
Massachusetts	11	5.58	West Virginia	.....	.....
Virginia	87	5.06	Others	.....	.....
Ohio	12	4.89			
Tennessee	1	4.07	Total	923	5.86
Florida	6	4.05			

TABLE VI.—*Deaths from diseases, States of occurrence (excluding large camps), enlisted men in the United States, by months, 1919 (excluding deaths from remaining cases, 1918)—Absolute numbers.*

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Alabama	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Alaska	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	2
Arizona	4	4	4	.....	1	.....	2	1	3	1	1	1	.....	22
Arkansas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
California	15	6	.....	2	2	2	3	3	.....	3	1	.....	.....	37
Colorado	2	1	2	2	2	1	1	.....	.....	1	.....	.....	2	14
Connecticut	3	.....	2	2	1	.....	1	.....	.....	1	.....	.....	1	11
Delaware	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
District of Columbia	13	5	7	2	.....	1	2	2	.....	.....	.....	.....	2	34
Florida	5	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	6
Georgia	5	3	3	2	2	2	2	1	1	1	1	1	1	25
Idaho	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1
Illinois	7	1	2	2	1	.....	3	1	2	1	1	1	1	23
Indiana	2	4	.....	.....	1	.....	2	.....	.....	1	1	.....	.....	11
Iowa	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Kansas	2	.....	2	2	1	.....	.....	.....	.....	.....	.....	.....	1	8
Kentucky	2	4	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	9
Louisiana	1	.....	.....	.....	.....	2	.....	.....	1	1	.....	.....	.....	5
Maine	.....	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	3
Maryland	15	17	4	3	.....	1	1	2	2	.....	.....	1	.....	46
Massachusetts	.....	3	2	3	1	1	.....	.....	.....	1	.....	.....	.....	11
Michigan	3	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	6
Minnesota	2	.....	5	1	1	.....	.....	.....	.....	.....	.....	.....	.....	9
Mississippi	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2
Missouri	.....	1	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1	4
Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebraska	3	.....	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	6
Nevada	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hampshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Jersey	38	31	31	10	9	3	10	3	.....	.....	1	.....	4	140
New Mexico	5	7	3	5	2	2	3	.....	1	2	1	.....	1	32
New York	58	23	20	11	8	10	4	2	8	2	.....	.....	10	156
North Carolina	5	6	.....	4	3	2	.....	1	6	.....	.....	1	6	34
North Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio	6	3	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	12
Oklahoma	4	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	6
Oregon	3	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1	6
Pennsylvania	5	4	3	.....	1	.....	.....	1	.....	.....	.....	.....	2	17
Rhode Island	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
South Carolina	1	4	3	2	6	.....	1	.....	.....	.....	.....	.....	18	35
South Dakota	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Tennessee	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Texas	40	28	6	3	3	4	4	.....	3	.....	1	1	1	94
Utah	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Vermont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Virginia	25	17	9	9	5	8	4	2	1	2	1	.....	4	87
Washington	57	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	61
West Virginia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Wyoming	2	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	5
Others	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	336	181	116	74	56	41	47	20	32	18	9	7	56	993

TABLE VII.—*Discharges for disability from disease, States of occurrence (excluding large camps), enlisted men in the United States, 1919 (excluding discharges from remaining cases 1918)—Absolute numbers and ratios per 1,000.*

States.	Number.	Ratio.	States.	Number.	Ratio.
Iowa	218	457.02	Wyoming	20	24.91
Colorado	468	303.35	New Jersey	498	22.17
Connecticut	51	225.66	Montana	3	22.06
South Dakota	2	181.82	Washington	53	20.45
Minnesota	111	175.35	Rhode Island	11	20.22
Indiana	227	165.81	Alabama	17	18.44
South Carolina	160	139.13	Oregon	6	17.70
North Carolina	232	125.00	Oklahoma	78	16.89
Massachusetts	206	104.52	Delaware	7	15.63
Illinois	293	99.62	Florida	23	15.53
Georgia	629	97.25	Kentucky	42	14.14
Utah	56	83.58	Maine	8	10.70
Arkansas	40	81.14	Vermont	3	9.23
Ohio	189	77.08	Tennessee	2	8.13
New York	1,344	72.30	Kansas	24	7.24
Pennsylvania	147	68.15	Nebraska	7	6.60
New Mexico	303	63.11	New Hampshire	1	5.92
California	656	62.01	West Virginia	1	5.85
Wisconsin	4	54.05	Others	1	4.39
Michigan	81	50.53	Alaska	2	3.06
District of Columbia	173	42.90	Idaho	.....	.....
Virginia	732	42.57	Mississippi	.....	.....
Arizona	223	36.93	Nevada	.....	.....
Maryland	220	31.24	North Dakota	.....	.....
Louisiana	21	29.09			
Missouri	44	25.51	Total	8,345	49.23
Texas	708	25.00			

TABLE VIII.—*Discharges for disability from disease, States of occurrence (excluding large camps), enlisted men in the United States, by months, 1919 (excluding discharges from remaining cases 1918)—Absolute numbers.*

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Alabama	8	.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....	4	17
Alaska	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	2
Arizona	19	30	30	30	14	24	17	9	8	7	4	.....	31	223
Arkansas	5	2	5	2	5	5	3	1	1	.....	.....	.....	11	40
California	63	49	47	71	79	61	84	85	47	17	9	6	38	656
Colorado	27	29	46	72	127	88	24	21	1	2	3	2	26	468
Connecticut	5	2	3	8	4	5	7	3	2	.....	1	.....	11	51
Delaware	.....	3	1	.....	2	.....	.....	.....	.....	1	.....	.....	.....	7
District of Columbia	31	27	27	11	14	20	9	9	6	6	.....	.....	13	173
Florida	3	8	2	5	.....	.....	.....	1	2	1	.....	.....	1	23
Georgia	139	88	86	81	59	47	46	15	11	6	13	.....	38	629
Idaho	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois	17	29	32	23	24	40	21	13	11	2	3	.....	78	293
Indiana	35	36	33	13	22	15	25	20	2	2	1	2	21	227
Iowa	8	13	31	26	40	58	10	7	3	12	1	.....	9	218
Kansas	2	3	1	2	3	4	1	1	3	1	1	.....	2	24
Kentucky	3	.....	5	9	3	4	8	4	.....	5	.....	.....	1	42
Louisiana	7	1	4	1	3	.....	.....	2	.....	1	2	.....	.....	21
Maine	1	3	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	8
Maryland	36	26	25	10	13	12	14	11	8	5	4	1	55	220
Massachusetts	24	20	22	16	22	20	1	1	.....	31	.....	1	48	206
Michigan	9	7	4	15	8	18	15	.....	.....	.....	.....	.....	5	81
Minnesota	23	9	14	15	16	15	6	5	1	.....	.....	.....	7	111
Mississippi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Missouri	3	3	4	1	6	5	4	8	3	4	1	.....	2	44
Montana	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Nebraska	2	2	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	7
Nevada	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hampshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1
New Jersey	90	65	68	54	60	35	43	22	12	2	1	1	45	498
New Mexico	14	15	22	54	34	46	18	6	4	15	1	1	73	303
New York	199	163	159	140	105	121	61	48	22	14	8	3	301	1,344
North Carolina	52	28	21	23	10	17	6	4	9	2	3	3	54	232
North Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio	81	55	26	16	4	3	1	1	.....	1	.....	.....	1	189
Oklahoma	27	5	10	8	11	5	5	.....	1	1	.....	.....	5	78
Oregon	5	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Pennsylvania	24	19	13	5	14	17	13	5	.....	1	1	1	34	147
Rhode Island	3	3	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	11
South Carolina	7	24	23	9	17	10	2	4	1	.....	.....	.....	63	160
South Dakota	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2
Tennessee	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	2
Texas	107	94	69	105	68	58	41	26	31	24	3	4	78	708
Utah	8	10	2	9	6	8	4	.....	1	1	.....	.....	7	56
Vermont	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	3
Virginia	217	113	58	36	48	55	47	18	6	3	1	2	128	732
Washington	12	8	12	4	3	3	1	6	1	.....	1	1	1	53
West Virginia	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Wisconsin	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....	1	.....	4
Wyoming	.....	1	4	5	3	5	.....	1	.....	.....	.....	.....	1	20
Others	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Total	1,322	994	920	882	851	825	539	358	199	170	62	29	1,194	8,345

TABLE IX.—*Days lost from disease, States of occurrence (excluding large camps), enlisted men in the United States, 1919 (excluding days from remaining cases, 1918)—Absolute numbers and ratios per 1,000 (noneffective rate).*

States.	Number.	Ratio.	States.	Number.	Ratio.
Connecticut	24,815	300.82	Louisiana	8,708	33.04
South Carolina	66,765	159.06	Arizona	71,244	32.33
Colorado	84,162	149.44	Texas	318,845	30.84
Iowa	19,557	112.33	New Hampshire	1,846	29.93
North Carolina	75,697	111.74	Montana	1,438	28.97
Indiana	50,923	101.91	Wisconsin	749	27.73
Illinois	103,468	96.38	Kentucky	30,039	27.71
Pennsylvania	68,683	87.23	Ohio	23,168	25.89
Minnesota	15,651	67.75	Alabama	8,688	25.82
New York	413,065	60.88	Delaware	4,129	25.25
District of Columbia	88,216	59.92	West Virginia	1,570	25.16
Arkansas	10,679	59.35	Oregon	3,038	24.55
Wyoming	16,731	57.09	Florida	13,253	24.52
New Mexico	99,137	56.57	Mississippi	1,324	24.18
Georgia	122,880	52.04	Oklahoma	40,015	23.74
Utah	12,362	50.55	Kansas	27,966	23.11
California	187,153	48.47	Vermont	2,413	20.34
South Dakota	191	47.57	Maine	5,420	19.85
Maryland	118,556	46.12	Rhode Island	2,977	14.99
Virginia	279,415	44.53	Alaska	2,729	11.43
Massachusetts	31,629	43.96	Others	778	9.35
New Jersey	336,658	41.06	Idaho	113	.....
Michigan	24,008	41.03	North Dakota	12	.....
Missouri	25,440	40.41	Nevada	1	.....
Tennessee	3,520	39.20			
Washington	33,874	35.81	Total	2,896,610	46.81
Nebraska	12,912	33.34			

TABLE X.—*Days lost from disease, States of occurrence (excluding large camps), enlisted men in the United States, by months, 1919 (excluding days from remaining cases, 1918)—Absolute numbers.*

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Alabama	2,885	1,193	1,014	115	292	213	476	688	528	387	209	77	611	8,688
Alaska	214	74	70	189	157	581	240	212	325	137	183	111	236	2,729
Arizona	9,373	6,453	6,751	4,995	4,362	4,820	5,059	6,429	7,471	4,282	2,762	2,102	6,385	71,244
Arkansas	2,912	1,353	1,026	830	369	589	393	1,135	710	92	38	55	1,177	10,679
California	19,994	13,817	14,583	14,164	15,749	16,494	20,582	20,914	14,021	13,018	9,054	4,393	10,370	187,153
Colorado	12,686	9,432	10,685	12,006	7,142	7,575	4,902	3,767	2,513	2,682	2,203	2,482	6,087	84,162
Connecticut	2,544	1,837	1,598	3,117	3,161	1,844	1,695	640	632	49	181	371	7,146	24,815
Delaware	620	1,324	642	363	198	56	139	78	231	236	65	177	.....	4,129
District of Columbia	14,847	9,246	10,414	6,581	4,750	5,660	6,173	7,557	7,051	5,252	4,020	2,289	4,376	88,216
Florida	4,489	1,091	936	756	673	713	526	695	1,012	629	654	463	616	13,253
Georgia	22,853	12,312	13,918	11,488	9,265	7,660	8,064	6,233	6,914	6,886	5,979	3,420	7,888	122,880
Idaho	.....	113	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	113
Illinois	12,428	12,116	14,644	9,324	8,239	9,354	5,106	4,252	3,809	3,264	2,799	885	17,248	103,468
Indiana	9,106	6,399	4,788	4,651	4,198	3,860	4,354	5,435	1,092	876	895	857	4,412	50,923
Iowa	2,361	1,870	2,512	1,225	965	1,432	2,469	1,524	1,193	2,813	137	76	980	19,557
Kansas	7,344	5,311	3,872	1,871	1,568	1,007	631	1,384	1,453	1,166	1,499	630	230	27,966
Kentucky	7,629	5,781	2,862	1,500	1,530	1,078	1,286	2,014	1,300	2,074	1,423	1,004	558	30,039
Louisiana	1,675	1,123	350	328	743	505	746	363	618	515	588	938	216	8,708
Maine	1,487	894	683	477	88	210	256	109	221	395	346	254	.....	5,420
Maryland	27,072	18,741	13,148	7,003	4,527	5,071	5,267	7,049	6,563	5,553	2,446	2,631	13,485	118,556
Massachusetts	5,377	3,492	4,296	4,036	2,172	1,490	708	608	501	823	317	484	7,325	31,629
Michigan	5,449	2,846	3,497	3,694	1,588	1,002	3,604	163	304	278	106	142	1,341	24,008
Minnesota	3,016	2,218	1,533	1,267	1,293	748	701	2,409	224	249	513	176	1,304	15,651
Mississippi	737	142	159	8	89	8	95	7	30	2	16	2	35	1,324
Missouri	1,808	2,675	2,834	2,105	2,220	3,081	2,615	1,999	1,234	1,494	1,206	1,390	779	25,440
Montana	497	419	117	61	290	.....	24	13	.....	3	.....	14	.....	1,438
Nebraska	2,371	3,877	987	456	428	294	388	161	1,061	1,134	1,204	551	.....	12,912
Nevada	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1
New Hampshire	475	178	197	182	118	61	80	45	169	44	26	215	75	1,846
New Jersey	59,175	49,924	49,266	36,176	24,088	18,006	25,915	21,593	17,226	9,921	2,992	1,628	21,748	336,658
New Mexico	8,335	8,761	9,495	6,815	8,514	8,281	8,576	7,634	4,865	5,877	2,347	2,247	17,290	99,137
New York	60,866	59,735	57,777	39,073	32,713	27,637	22,019	17,716	13,092	7,150	4,534	4,894	65,859	413,065
North Carolina	13,784	8,567	4,507	5,139	3,516	5,234	2,085	2,715	4,810	2,228	1,995	1,648	19,469	75,697
North Dakota	2	.....	.....	5	5	.....	.....	.....	.....	.....	.....	.....	.....	12
Ohio	6,533	5,068	2,069	1,461	1,132	1,175	740	1,207	936	879	954	805	209	23,168
Oklahoma	10,691	6,570	5,609	2,326	2,286	1,803	3,078	1,557	1,423	1,477	1,158	805	1,222	40,015
Oregon	1,688	126	272	210	177	145	42	37	60	39	59	55	128	3,038
Pennsylvania	13,845	9,904	8,778	5,164	3,612	4,563	3,523	3,025	682	1,842	1,486	622	11,637	68,683
Rhode Island	794	281	550	207	88	20	264	111	192	105	249	55	61	2,977
South Carolina	2,293	11,397	10,800	4,076	6,494	2,298	1,782	966	324	328	45	.....	25,962	66,765
South Dakota	.....	102	3	.....	.....	19	.....	.....	67	.....	.....	.....	.....	191
Tennessee	708	635	649	203	21	36	170	327	140	203	338	90	.....	3,520

TABLE X.—*Days lost from diseases, States of occurrence (excluding large camps), enlisted men in the United States, by months, 1919 (excluding days from remaining cases, 1918)—Absolute numbers*—Continued.

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Texas	51,570	44,779	28,885	25,813	22,256	24,600	22,090	21,425	22,262	19,475	13,732	8,740	13,218	318,845
Utah	2,687	2,237	1,314	1,113	549	722	522	448	108	412	310	440	1,500	12,362
Vermont	886	179	127	67	23	.....	176	295	248	147	176	89	.....	2,413
Virginia	77,039	37,697	28,675	17,015	19,014	23,744	22,024	10,838	7,491	4,997	3,526	2,153	25,202	279,415
Washington	17,323	4,574	2,556	2,059	1,391	1,126	711	834	881	416	663	521	819	33,874
West Virginia	591	471	190	127	15	14	59	3	.....	.....	100	.....	.....	1,570
Wisconsin	.....	220	77	39	3	112	17	.....	.....	.....	49	.....	211	21	749
Wyoming	470	629	1,305	3,075	1,876	2,313	2,594	2,178	886	464	473	437	31	16,731
Others	87	17	10	.....	99	4	100	18	5	.....	.....	.....	438	778
Total	511,615	378,200	331,039	242,965	204,047	197,258	193,066	168,810	136,869	110,342	73,994	51,719	296,694	2,896,610

TABLE XI.—*Strength for total enlisted, by States (excluding the large camps), by months, 1919.*[1]

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Alabama	2,483	2,150	1,796	837	471	397	515	666	510	489	402	351
Alaska	874	744	628	620	571	587	534	528	605	652	723	785
Arizona	7,284	7,264	6,041	5,305	4,972	4,853	5,343	5,857	6,291	6,559	6,362	6,332
Arkansas	1,533	1,069	786	373	333	273	268	354	261	247	255	159
California	17,289	15,418	12,597	11,550	9,205	8,936	8,620	9,033	9,154	8,699	8,303	8,158
Colorado	1,916	1,915	1,538	1,494	1,412	1,387	1,453	1,571	1,486	1,415	1,431	1,500
Connecticut	440	378	350	308	297	334	347	263	.....	.....	.....	.....
Delaware	1,003	788	717	444	303	271	286	318	331	314	315	283
District of Columbia	6,732	6,800	5,551	5,165	3,799	2,979	2,831	2,799	2,932	2,997	2,920	2,886
Florida	3,007	2,276	2,079	1,705	1,470	884	976	978	1,042	1,076	1,125	1,151
Georgia	8,652	8,663	8,593	7,787	6,810	5,931	6,651	5,543	4,729	4,539	4,460	5,259
Illinois	6,089	4,311	3,951	3,616	3,040	2,376	2,451	2,484	2,368	1,943	1,444	1,225
Indiana	2,978	1,899	1,583	1,094	698	772	959	839	787	1,623	1,585	1,611
Iowa	766	732	680	590	539	528	521	483	461	322	49	50
Kansas	4,701	6,116	4,314	3,831	3,224	2,367	2,483	2,520	2,449	2,389	2,542	2,852
Kentucky	10,355	4,861	2,819	2,906	2,173	1,787	1,485	1,736	1,979	1,798	1,948	1,797
Louisiana	1,722	965	789	676	590	458	415	430	485	537	656	945
Maine	1,426	1,227	1,000	625	547	526	549	600	639	638	608	595
Maryland	18,785	16,260	11,744	7,278	4,028	2,801	3,154	3,741	4,497	3,623	4,281	4,315
Massachusetts	3,535	3,563	3,435	2,577	2,220	1,680	954	987	964	1,036	1,323	1,383
Michigan	3,912	2,959	2,344	1,908	2,068	2,098	1,158	848	471	473	473	518
Minnesota	1,089	800	788	686	681	679	607	346	449	450	516	508
Mississippi	897	429	234	78	72	19	20	17	13	11	5	.....
Missouri	1,541	1,375	1,418	1,947	2,117	2,266	1,943	1,864	1,824	1,338	1,495	1,571
Montana	299	453	208	130	92	77	70	70	60	60	59	59
Nebraska	2,303	1,626	1,249	956	689	360	644	487	807	1,105	1,244	1,263
New Hampshire	237	251	211	183	156	156	145	143	134	131	141	143
New Jersey	36,041	31,859	37,937	34,904	30,635	23,277	23,619	15,501	10,239	10,412	7,461	7,734
New Mexico	5,729	5,986	5,676	5,016	4,678	4,523	4,577	4,723	4,557	4,041	3,907	4,193
New York	32,328	27,955	24,471	22,294	20,424	19,435	20,475	13,987	12,623	11,849	9,004	8,248
North Carolina	2,559	2,396	2,474	2,411	1,835	1,547	1,570	1,878	1,632	1,571	1,140	1,266
North Dakota	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ohio	7,014	5,318	2,412	1,502	1,589	1,552	1,730	1,515	1,691	1,617	1,740	1,745
Oklahoma	12,693	8,533	7,647	4,849	4,752	3,349	2,889	2,260	2,266	2,054	2,156	1,953
Oregon	1,321	373	329	306	250	239	223	204	206	202	204	209
Pennsylvania	6,414	5,230	4,256	2,630	2,013	1,377	800	503	588	614	790	674
Rhode Island	873	796	712	536	451	397	495	458	440	433	452	490
South Carolina	2,420	2,296	2,521	2,146	1,367	824	512	377	349	320	333	339
South Dakota	24	9	11	10	6	6	7	14	14	15	13	13
Tennessee	766	796	159	96	113	76	111	209	168	153	153	153
Texas	56,709	45,152	37,170	30,336	26,696	23,571	21,209	20,850	19,405	18,464	19,194	21,009
Utah	739	891	960	882	699	790	737	529	411	412	448	545

[1] Source of information: Monthly sick and wounded reports to the Surgeon General's Office; daily average strength for each month.

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TABLE XI.—*Strength for total enlisted, by States (excluding the large camps), by months, 1919*—Continued.

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Vermont	525	440	119	101	96	153	380	324	400	454	450	463
Virginia	30,419	28,290	27,425	21,711	22,932	23,882	17,589	8,321	7,009	7,008	6,139	5,608
Washington	10,334	3,765	2,692	2,635	2,286	1,849	1,408	1,278	1,274	1,303	1,144	1,130
West Virginia	484	425	262	252	180	125	149	158	.....	.....	20	.....
Wisconsin	3	286	317	181	54	34	9	1	.....	.....	.....	.....
Wyoming	347	527	988	954	1,212	1,272	1,045	995	592	486	573	638
Others	178	107	363	240	508	1,227	76	40	.....	.....	.....	.....
Aggregate for year	319,769	266,722	236,344	198,661	175,353	155,287	144,992	119,630	109,592	105,872	99,986	102,109

TABLE XII.—*Strength of large camps, officers, by months, 1919.*[1]

Camps.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Beauregard, La	419	248	123	40	20	14	14	.....	.....	.....	.....	.....
Bowie, Tex	219	234	201	171	159	226	117	2	.....	.....	.....	.....
Cody, N. Mex	118	86	43	20	9	9	8	5	.....	.....	.....	.....
Custer, Mich	1,027	550	409	341	316	150	261	159	97	67	87	87
Devens, Mass	921	446	386	338	324	240	234	159	110	61	55	59
Dix, N. J	711	678	608	750	783	655	834	1,910	1,169	666	258	208
Dodge, Iowa	677	457	444	404	380	404	424	474	431	309	232	144
Eustis, Va	172	169	207	135	151	121	105	81	81	76	67	65
Forrest, Ga	68	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fremont, Calif	161	79	84	5	.....	.....	.....	.....	.....	.....	.....	.....
Funston, Kans	940	524	328	279	329	336	274	196	173	138	107	95
Gordon, Ga	894	534	448	398	264	290	348	538	328	339	237	231
Grant, Ill	1,173	820	748	700	856	1,150	1,212	826	711	342	254	290
Greene, N. C	284	207	73	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greenleaf, Ga	182	50	70	60	.....	.....	.....	.....	.....	.....	.....	.....
Hancock, Ga	783	587	203	46	10	.....	.....	.....	.....	.....	.....	.....
Humphreys, Va	326	314	587	467	396	224	220	182	210	259	195	199
Jackson, S. C	857	603	410	355	269	344	202	101	104	122	119	123
Johnston, Fla	118	111	36	23	19	12	9	6	9	5	4	4
Kearny, Calif	710	488	290	297	296	127	163	97	91	69	59	63
Lee, Va	1,365	1,089	1,175	842	524	593	540	378	223	154	109	104
Lewis, Wash	983	804	461	370	362	279	365	352	232	221	171	168
Logan, Tex	564	265	61	18	.....	.....	.....	.....	.....	.....	.....	.....
MacArthur, Tex	387	149	150	38	7	.....	.....	.....	.....	.....	.....	.....
McClellan, Ala	692	173	122	102	49	35	29	24	18	11	5	5
Meade, Md	1,098	653	593	526	571	796	469	273	760	416	232	267
Mills, N. Y	325	298	408	467	391	401	342	293	185	25	19	.....
Pike, Ark	712	407	375	401	357	369	426	298	564	456	326	363
Sevier, S. C	316	217	119	41	.....	.....	.....	.....	.....	.....	.....	.....
Shelby, Miss	306	248	241	222	193	189	179	154	43	6	.....	.....
Sheridan, Ala	475	220	69	30	24	10	8	6	2	.....	.....	.....
Sherman, Ohio	457	509	403	522	382	427	384	374	227	108	127	106
Taylor, Ky	967	1,231	1,261	1,001	590	515	448	361	266	418	440	540
Travis, Tex	1,040	680	451	414	403	354	326	301	339	280	233	215
Upton, N. Y	527	580	895	790	1,020	648	739	581	270	165	117	120
Wadsworth, S. C	332	218	141	69	54	54	54	48	33	3	.....	.....
Wheeler, Ga	127	88	44	20	10	10	1	.....	.....	.....	.....	.....
Aggregate for year	21,466	15,019	12,667	10,702	9,518	8,982	8,735	8,179	6,676	4,716	3,453	3,456

[1] Source of information: Monthly sick and wounded reports to the Surgeon General's Office; daily average strength for each month.

TABLE XIII.—*Strength of large camps, white enlisted, 1919.*[1]

Camps.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Beauregard, La	5,744	3,738	1,498	192	73	37	20	.....	.....	.....	.....	.....
Bowie, Tex	3,749	4,570	3,499	2,626	2,180	3,023	888	17	.....	.....	.....	.....
Cody, N. Mex	2,162	1,750	1,157	577	137	29	15	10	.....	.....	.....	.....
Custer, Mich.[2]	19,238	8,740	7,567	8,438	5,712	2,070	1,436	623	602	603	836	943
Devens, Mass	20,736	7,624	7,160	6,572	8,721	5,032	4,460	1,758	1,575	1,170	1,169	991
Dix, N. J.[2]	14,124	15,566	14,190	12,353	13,338	13,586	9,578	7,632	5,540	5,155	3,667	4,724
Dodge, Iowa[2]	13,281	9,515	8,179	6,801	6,068	5,167	4,298	2,474	2,390	1,506	1,262	940
Eustis, Va	3,040	2,939	4,848	2,546	1,770	1,353	812	641	959	868	803	938
Forrest, Ga	1,581	444	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fremont, Calif	2,292	1,419	871	61	.....	.....	.....	.....	.....	.....	.....	.....
Funston, Kans.[2]	22,987	9,520	5,720	4,217	6,279	4,455	1,985	1,197	1,164	992	1,104	809
Gordon, Ga.[2]	13,202	7,645	5,709	6,122	3,783	2,273	2,797	4,419	2,448	2,757	2,265	2,115
Grant, Ill	20,355	16,754	14,525	15,114	12,490	6,189	6,561	4,134	3,855	3,151	3,160	3,256
Greene, N. C.[2]	3,414	2,352	652	.....	.....	.....	.....	.....	.....	.....	.....	.....
Green leaf, Ga	1,820	516	1,166	800	.....	.....	.....	.....	.....	.....	.....	.....
Hancock, Ga	10,524	6,021	2,020	352	68	.....	.....	.....	.....	.....	.....	.....
Humphreys, Va.[2]	4,565	2,590	3,608	1,820	1,490	876	1,034	694	813	523	528	656
Jackson, S. C.[2]	14,345	8,140	5,628	4,819	3,401	8,085	3,455	1,444	1,610	2,285	2,569	2,638
Johnston, Fla	2,628	1,375	651	175	40	36	32	30	30	28	27	27
Kearny, Calif	12,792	6,312	3,162	2,811	1,143	792	873	659	573	570	492	621
Lee, Va.[2]	21,912	14,574	10,465	7,620	5,821	7,948	8,442	2,364	1,719	1,660	1,563	1,588
Lewis, Wash.[2]	20,048	11,974	7,012	4,334	3,831	2,963	1,973	1,546	1,617	1,477	1,971	2,000
Logan, Tex	9,110	3,613	515	122	.....	.....	.....	.....	.....	.....	.....	.....
MacArthur, Tex	5,138	3,079	2,204	424	108	.....	.....	.....	.....	.....	.....	.....
McClellan, Ala	13,076	2,908	1,580	926	129	75	61	54	48	35	28	26
Meade, Md	18,606	7,992	8,917	7,289	6,655	6,803	3,752	2,275	8,090	4,669	3,757	3,907
Mills, N. Y	4,375	3,718	5,196	8,299	3,973	4,222	2,262	1,888	1,238	725	689	.....
Pike, Ark	11,987	7,025	6,370	5,985	3,369	3,537	3,385	2,718	4,365	4,004	3,390	3,076
Sevier, S. C	4,473	2,736	1,517	446	.....	.....	.....	.....	.....	.....	.....	.....
Shelby, Miss	4,680	4,075	3,405	2,998	3,222	2,136	1,580	1,172	591	30	.....	.....
Sheridan, Ala	9,560	3,999	425	77	56	9	8	6	2	.....	.....	.....
Sherman, Ohio[2]	9,210	6,549	6,707	10,887	7,356	6,441	4,699	3,495	1,860	1,361	1,400	1,521
Taylor, Ky.[2]	13,292	11,786	10,432	8,884	6,512	5,430	5,237	3,500	2,758	4,074	4,958	5,628
Travis, Tex	17,128	10,472	8,182	5,697	2,547	2,289	2,109	2,216	3,327	2,916	2,945	3,044
Upton, N. Y.[2]	13,161	10,048	21,493	12,629	16,020	6,449	7,413	3,200	2,253	2,202	2,364	2,635
Wadsworth, S. C	5,165	3,928	1,555	793	462	438	455	347	159	6	.....	.....
Wheeler, Ga	1,724	1,289	462	138	10	4	.....	.....	.....	.....	.....	.....
Aggregate for year	375,224	227,295	188,248	153,944	126,764	101,747	79,620	50,513	49,586	42,767	40,947	42,083

[1] Source of information: Monthly sick and wounded reports to the Surgeon General's Office; daily average strength for each month.
[2] Increased by estimates based on demobilization figures.

TABLE XIV.—*Strength of large camps, colored enlisted, 1919.*[1]

Camps.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Beauregard, La.	1,126	1,491	310									
Bowie, Tex.	1,307	1,246	1,251	1,063	301	112	13					
Cody, N. Mex.	1											
Custer, Mich.[2]	765	880	508	369	156	282	137					
Devens, Mass.	1,210	1,118	1,039	590	461	12	12	1				
Dix, N. J.[2]	2,203	2,369	1,490	993	882	858	966	1,700	250			
Dodge, Iowa[2]	1,287	1,231	981	762	515	154						
Eustis, Va.	488	511	519	572	72	48	39	16				
Forrest, Ga.	0											
Fremont, Calif.	1											
Funston, Kans.[2]	783	948	959	940	76	61	30	1				
Gordon, Ga.[2]	1,702	1,892	1,080	999	501	922	2,483	1,142	596	107	61	45
Grant, Ill.	2,623	1,380	953	615	218	82	75	47	32	2		
Greene, N. C.[2]	634	1,567	49									
Greenleaf, Ga.	136	0	780	140								
Hancock, Ga.	2,529	1,212	445									
Humphreys, Va.[2]	1,585	1,404	1,089	385	280	261	59	37	34	40	43	30
Jackson, S. C.[2]	3,079	2,864	1,615	1,214	1,095	725	873	0	0	1	30	
Johnston, Fla.	130	106										
Kearny, Calif.			3									
Lee, Va.[2]	3,036	2,295	2,182	771	476	231	208	60	42	12	15	
Lewis, Wash.[2]	36	8	9	2	1							
Logan, Tex.	728	723	1									
MacArthur, Tex.	1,138	464										
McClellan, Ala.	1,524	650	360	243	114							
Meade, Md.	2,124	5,364	2,169	1,674	816	621	119	6	0	35	21	
Mills, N. Y.	1,251	1,198	1,195	1,194	1,168	710	216	194	219			
Pike, Ark.	1,625	849	215	242	683	284	632	69	65	19	6	37
Sevier, S. C.	941	653	121									
Shelby, Miss.	1,603	948	1,103	384	264	456	973	542				
Sheridan, Ala.	950	771	149									
Sherman, Ohio[2]	1,957	1,737	1,780	2,083	926	441	807	381	147	5	5	5
Taylor, Ky.[2]	2,430	2,591	2,011	751	1,171	933	1,255	237	20			
Travis, Tex.	2,721	2,033	1,362	308	50	137	158	148	29	16	18	19
Upton, N. Y.[2]	656	1,912	516	645	247	1,101	1,495	80	70	85	63	48
Wadsworth, S. C.	1,227	756	580	116								
Wheeler, Ga.	742	731	147									
Aggregate for year	46,281	43,902	26,881	17,055	10,473	8,431	10,550	4,661	1,504	322	282	184

[1] Source of information: Monthly sick and wounded reports to the Surgeon General's Office; daily average strength for each month.
[2] Increased by estimates based on demobilization figures.

TABLE XV.—*Admissions, United States Army, 1919.*

ABSOLUTE NUMBERS.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).								
1	Typhoid fever	467	466	19	407	18	22	447	1
3	Relapsing fever	1	1		1			1	
4	Malarial fevers (all)	2,308	1,868	78	1,648	130	12	1,790	440
4a	Malarial fever, estivo-autumnal.	357	271	8	231	30	2	263	86
4b	Malarial fever, mixed	14	6	1	4	1		5	8
4c	Malarial fever, quartan	14	13	1	12			12	1
4d	Malarial fever, tertian	1,745	1,406	57	1,261	84	4	1,349	339
4e	Malarial fever, unclassified	178	172	11	140	15	6	161	6
5	Smallpox	88	87	1	56	30		86	1
6	Measles (all)	2,371	2,346	28	2,057	201	60	2,318	25
7	Scarlet fever	1,484	1,483	31	1,423	3	26	1,452	1
8	Whooping cough	14	14	2	12			12	
9	Diphtheria and results	2,187	2,185	87	1,946	55	98	2,099	1
10	Influenza (all)	67,778	67,518	3,490	53,068	6,529	4,431	64,028	260
12	Asiatic cholera	17	11		11			11	6
14	Dysentery (all)	577	489	49	380	28	32	440	88
14a	Dysentery, bacillary	66	61	4	52	1	4	57	5
14b	Dysentery, balantidic	2							2
14c	Dysentery, entamœbic	207	173	25	134	10	4	148	34
14e	Dysentery, unclassified	302	255	20	194	17	24	235	47
17	Leprosy	3							3
18	Erysipelas	399	399	25	334	29	11	374	
19a	Carrier, bacillus, diphtheria	1,345	1,343	31	1,252	20	40	1,312	2
19b	Carrier, bacillus, typhoid	17	17	1	15		1	16	
19c	Carrier, meningococcus	555	555	5	508	18	24	550	
19d	Carrier, epidemic diseases, others.	123	107	4	100	2	1	103	16
19e	Chicken pox	481	445	18	285	130	12	427	36
19f	German measles	425	398	5	360	15	18	393	27
19g	Meningitis, cerebrospinal (epidemic).	768	766	25	631	84	26	741	2
19h	Mumps	36,001	35,592	372	30,122	3,796	1,302	35,220	409
19i	Paratyphoid A	49	49	3	39	3	4	46	
19j	Paratyphoid B	37	37	4	30	1	2	33	
19k	Poliomyelitis, anterior, acute.	12	12		11	1		12	
19l	Trench fever	266	266	6	232	2	26	260	
19m	Trench mouth	58	58	9	44		5	49	
19n	Typhoid vaccination	1,952	1,911	17	1,838	33	23	1,894	41
19o	Vaccinia	710	704	6	682	13	3	698	6
19p	Epidemic diseases, others	718	615	63	526	20	6	552	103
20a	Septicemia, general	36	36	1	30	4	1	35	
22	Anthrax	13	13	1	11	1		12	
24	Tetanus	4	4		4			4	
25a	Trench foot	216	216	5	170	23	18	211	
25b	Mycosis (others)	11	8	1	5	2		7	3
26	Pellagra	10	10		9	1		10	
27	Beriberi	6							6
47	Acute articular rheumatism.	1,923	1,910	55	1,572	216	67	1,855	13
	II. TUBERCULOSIS.								
28a	Tuberculosis of lungs	5,482	5,324	359	4,116	727	122	4,965	158
28b	Suspected tuberculosis	1,413	1,408	61	1,040	228	79	1,347	5
29	Acute miliary tuberculosis	102	100	2	48	50		98	2
30–35	Tuberculosis, others	525	521	28	367	116	10	493	4
	Tuberculosis (all)	7,522	7,353	450	5,571	1,121	211	6,903	169

TABLE XV.—*Admissions, United States Army, 1919.*

ABSOLUTE NUMBERS.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
3	67	2	69	72	16	336	16	21	373	389	1
											3
57	1,003	33	1,036	1,093	8	153	25	12	190	198	4
5	40	5	45	50		7		2	9	9	4a
1	2	1	3	4							4b
1	8		8	9		2			2	2	4c
45	891	24	915	960	5	104	18	4	126	131	4d
5	62	3	65	70	3	40	7	6	53	56	4e
	39	30	69	69		8			8	8	5
11	1,048	163	1,211	1,222	16	863	35	60	958	974	6
19	1,113	2	1,115	1,134	11	300	1	26	327	338	7
2	8		8	10		4			4	4	8
40	777	28	805	845	47	1,139	27	98	1,264	1,311	9
1,186	13,915	1,005	14,920	16,106	2,193	37,039	5,502	4,430	46,971	49,164	10
											12
18	124	9	133	151	25	119	12	32	163	188	14
1	1	1	2	3	3	24		4	28	31	14a
											14b
9	51	2	53	62	12	24	3	4	31	43	14c
8	72	6	78	86	10	71	9	24	104	114	14e
											17
14	227	19	246	260	9	89	10	11	110	119	18
23	717	17	734	757	8	529	3	40	572	580	18a
	2		2	2	1	13		1	14	15	19b
1	271	8	279	280	4	227	10	24	261	265	19c
	39	1	40	40	4	41	1	1	43	47	19d
11	161	75	236	247	7	116	53	12	181	188	19e
4	248	14	262	266		104	1	17	122	122	19f
8	152	22	174	182	17	459	61	26	546	563	19g
198	13,902	2,458	16,360	16,558	161	15,153	1,319	1,299	17,771	17,932	19h
	4		4	4	2	29	3	4	36	38	19i
	4		4	4	4	15	1	2	18	22	19j
	2		2	2		8	1		9	9	19k
	8		8	8	6	224	2	26	252	258	19l
4	10		10	14	4	34		5	39	43	19m
4	1,577	23	1,600	1,604	11	227	6	22	255	266	19n
4	592	10	602	606	1	33	3	3	39	40	19o
14	127	4	131	145	6	114	7	6	127	133	19p
1	17	2	19	20		13	2	1	16	16	20a
1	7	1	8	9		3			3	3	22
	3		3	3		1			1	1	24
1	36	2	38	39	4	131	21	18	170	174	25a
	4	2	6	6	1	1			1	2	25b
	2	1	3	3		7			7	7	26
											27
29	841	96	937	966	24	694	119	66	879	903	47
286	2,521	338	2,859	3,145	64	1,485	386	122	1,993	2,057	28a
38	417	75	492	530	23	591	151	78	820	843	28b
	11	8	19	19	2	36	41		77	79	29
16	168	37	205	221	12	192	79	10	281	293	30–35
340	3,117	458	3,575	3,915	101	2,304	657	210	3,171	3,272	

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
3	Relapsing fever		1		1		
4	Malarial fevers (all)	13	57	70	127		411
4a	Malarial fever, estivo-autumnal	3	12	25	37		165
4b	Malarial fever, mixed		1		1		1
4c	Malarial fever, quartan						2
4d	Malarial fever, tertian	7	44	41	85		215
4e	Malarial fever, unclassified	3		4	4		28
5	Smallpox	1	1		1		
6	Measles (all)	1	11		11	19	16
7	Scarlet fever	1	2		2		
8	Whooping cough						
9	Diphtheria and results		1		1		1
10	Influenza (all)	111	59		59	102	154
12	Asiatic cholera		10		10		
14	Dysentery (all)	6	57	7	64		8
14a	Dysentery, bacillary						
14b	Dysentery, balantidic						
14c	Dysentery, entamœbic	4	44	5	49		6
14e	Dysentery, unclassified	2	13	2	15		2
17	Leprosy						
18	Erysipelas	2	4		4		5
19a	Carrier, bacillus, diphtheria		1		1		
19b	Carrier, bacillus, typhoid						
19c	Carrier, meningococcus						
19d	Carrier, epidemic diseases, others.		19		19		
19e	Chicken pox		2	1	3		
19f	German measles	1	6		6		
19g	Meningitis, cerebrospinal (epidemic).						
19h	Mumps	13	65	5	70	15	8
19i	Paratyphoid A	1					
19j	Paratyphoid B						
19k	Poliomyelitis, anterior, acute.						
19l	Trench fever						
19m	Trench mouth	1					
19n	Typhoid vaccination	2	5	4	9	7	3
19o	Vaccinia	1	7		7		4
19p	Epidemic diseases, others	43	261	9	270		
20a	Septicemia, general						
22	Anthrax						
24	Tetanus						
25a	Trench foot						
25b	Mycosis (others)						
26	Pellagra						
27	Beriberi						
47	Acute articular rheumatism	2	3	1	4		3
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs	9	34	3	37	21	6
28b	Suspected tuberculosis		6		6	14	
29	Acute miliary tuberculosis						
30–35	Tuberculosis, others		3		3	1	
	Tuberculosis (all)	9	43	3	46	36	6

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	International classification No.
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
4	1	5				1			1
									3
8		8	16	2	18	345		95	4
3		3	4		4	66		20	4a
						8			4b
						1			4c
			7	1	8	265		74	4d
5		5	5	1	6	5		1	4e
8		8				1			5
33		33	67	3	70	19	6		6
2		2	6		6	1			7
									8
7		7	21		21		1		9
1,330	1	1,331	469	22	491	152	92	16	10
1		1				6			12
70		70	2		2	77		11	14
27		27				2		3	14a
						2			14b
9		9				33		1	14c
34		34	2		2	40		7	14e
							3		17
5		5	4		4				18
2		2	3		3	2			19a
									19b
10		10							19c
1		1				16			19d
									d
5		5	1	1	2	27	5	4	19e
1	1	2	1		1	26		1	19f
11		11	9	1	10		1	1	19g
672	3	675	307	14	321	342	1	66	19h
6		6							19i
11		11							19j
1		1							19k
									19l
									19m
10	1	11	9		9	36		5	19n
42		42	4		4	6			19o
21		21	3		3	97	1	5	19p
									20a
1		1							22
									24
3		3							25a
						3			25b
									26
						2		4	27
26	1	27	5			13			47
48		48	1		1	121	24	13	28a
8	1	9	4	2	6	4		1	28b
1		1		1	1	2			29
3		3				2	1	1	30–35
60	1	61	5	3	8	129	25	15	

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	III. VENEREAL DISEASES (ALL).								
37	Syphilis (all)	13,418	13,287	430	9,014	2,978	865	12,857	131
37a	Syphilis, hereditary	27	26	.....	20	5	1	26	1
37b	Syphilis, primary	4,806	4,783	147	3,238	1,015	383	4,636	23
37c	Syphilis, secondary	5,728	5,686	200	3,986	1,177	323	5,486	42
37d	Syphilis, tertiary	1,912	1,857	51	1,199	548	59	1,806	55
37e	Syphilis, unclassified	945	935	32	571	233	99	903	10
38a	Chancroidal infection	14,205	14,158	273	9,389	3,052	1,444	13,885	47
38b	Gonococcus infection	33,995	33,737	969	24,580	5,709	2,479	32,768	258
	Venereal (all)	61,618	61,182	1,672	42,983	11,739	4,788	59,510	436
	IV. GENERAL DISEASES (OTHER).								
36	Rickets	108	106	1	101	3	1	105	2
39–45	Cancer and other malignant tumors.	132	131	19	103	7	2	112	1
46	Tumors, benign	2,278	2,250	127	1,975	111	37	2,123	28
48a	Arthritis	7,771	7,745	269	6,116	1,058	302	7,476	26
48b	Gout	14	14	7	5	1	1	7	.....
49	Scurvy	1	1	.....	1	.....	.....	1	.....
50	Diabetes, mellitus	168	168	23	131	13	1	145	.....
51a	Exophthalmic goiter (hyperthyroidism).	834	832	32	760	21	19	800	2
51b	Cretinism and myxedema	7	7	.....	6	.....	.....	6	1
52a	Addison's disease	2	2	.....	2	.....	.....	2	.....
52b	Acromegaly	9	9	.....	8	.....	1	9	.....
53a	Leukemia	12	12	1	11	.....	.....	11	.....
53b	Hodgkin's disease	16	16	.....	13	3	.....	16	.....
88	Goiter, simple	267	267	9	244	6	8	258	.....
116	Spleen, diseases of	5	5	1	5	.....	.....	5	.....
53c	Other diseases of the ductless glands.	38	38	.....	35	2	1	38	.....
54	Anæmia, chlorosis	110	102	13	86	1	2	89	8
55a	Hemophilia	6	6	.....	6	.....	.....	6	.....
55b	Obesity	5	5	.....	5	.....	.....	5	.....
55c	Purpura	28	27	1	24	1	1	26	1
55d	Muscular rheumatism	1,815	1,788	59	1,419	212	98	1,729	27
55e	General diseases, others	773	768	52	624	68	24	716	5
56a	Alcoholism (acute or chronic).	1,740	1,734	131	1,490	64	49	1,603	6
56b	Drug addiction	179	178	8	147	21	2	170	1
57–59	Poisoning, chronic	23	23	2	15	5	1	21	.....
	V. NERVOUS SYSTEM, DISEASES OF (ALL).								
60	Encephalitis	44	44	3	37	3	1	41	.....
61	Meningitis, simple	95	95	3	74	16	2	92	.....
62	Locomotor ataxia	33	33	3	24	6	.....	30	.....
63a	Multiple sclerosis	12	12	2	10	.....	.....	10	.....
63b	Spinal cord, diseases of (others).	75	73	4	62	3	4	69	2
64	Apoplexy	60	59	7	41	9	2	52	1
66a	Facial paralysis	151	151	10	124	13	4	141	.....
66b	Paraplegia	8	8	.....	5	2	1	8	.....
66c	Paralysis without specified cause (others).	202	200	8	176	12	4	192	2
69	Epilepsy	878	877	13	743	86	35	864	1
74a	Jacksonian epilepsy	9	9	.....	6	3	.....	9	.....

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
165	4,654	1,903	6,557	6,722	255	3,887	1,053	863	5,803	6,058	37
.....	13	.....	13	13	.....	6	5	1	12	12	37a
45	1,441	581	2,022	2,067	101	1,726	434	382	2,542	2,643	37b
81	2,289	933	3,222	3,303	111	1,360	235	322	1,917	2,028	37c
32	676	325	1,001	1,033	19	470	213	59	742	761	37d
7	235	64	299	306	24	325	166	99	590	614	37e
34	2,459	1,553	4,012	4,046	233	5,784	1,402	1,444	8,630	8,863	38a
211	11,860	4,386	16,246	16,457	747	12,006	1,102	2,479	15,587	16,334	38b
410	18,973	7,842	26,815	27,225	1,235	21,677	3,557	4,786	30,020	31,255	
.....	57	1	58	58	1	41	2	1	44	45	36
9	55	3	58	67	10	44	3	1	48	58	39–45
96	609	43	652	748	27	477	67	31	575	602	46
131	2,448	325	2,773	2,904	132	3,487	727	302	4,516	4,648	48a
3	3	1	4	7	3	2	.....	1	3	6	48b
.....	.....	.....	.....	.....	.....	1	.....	.....	1	1	49
17	65	4	69	86	6	59	9	1	69	75	50
13	414	8	422	435	19	333	13	19	365	384	51a
.....	4	.....	4	4	.....	2	.....	.....	2	2	51b
.....	1	.....	1	1	.....	1	.....	.....	1	1	52a
.....	1	.....	1	1	.....	7	.....	1	8	8	52b
1	5	.....	5	6	.....	6	.....	.....	6	6	53a
.....	3	1	4	4	.....	9	2	.....	11	11	53b
5	115	4	119	124	4	111	2	8	121	125	88
.....	2	.....	2	2	1	3	.....	.....	3	4	116
.....	21	2	23	23	.....	12	.....	1	13	13	53c
7	48	1	49	56	5	36	.....	2	38	44	54
.....	4	.....	4	4	.....	2	.....	.....	2	2	55a
.....	2	.....	2	2	.....	3	.....	.....	3	3	55b
1	10	.....	10	11	.....	13	1	1	15	15	55c
35	700	108	808	843	21	624	103	98	825	846	55d
23	280	27	307	330	29	318	39	24	381	410	55e
48	638	21	659	707	76	651	29	49	729	805	56a
3	124	18	142	145	4	23	2	2	27	31	56b
1	7	3	10	11	1	7	2	1	10	11	57–59
1	18	2	20	21	2	19	1	.....	20	22	60
1	19	6	25	26	2	55	10	2	67	69	61
2	15	4	19	21	1	6	2	.....	8	9	62
1	6	.....	6	7	1	3	.....	.....	3	4	63a
3	34	1	35	38	.....	21	2	4	27	27	63b
3	19	7	26	29	4	20	2	2	24	28	64
7	59	5	64	71	3	62	8	4	74	77	66a
.....	3	.....	3	3	.....	1	2	1	4	4	66b
5	113	4	117	122	3	57	8	4	69	72	66c
9	386	32	418	427	3	325	54	35	414	417	69
.....	2	3	5	5	.....	4	.....	.....	4	4	74a

TABLE XV.—*Admissions, United States Army*, 1919—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)	10	68	22	90	29	39
37a	Syphilis, hereditary						
37b	Syphilis, primary	1	[illegible]		9	4	5
37c	Syphilis, secondary	8	48	9	57	7	17
37d	Syphilis, tertiary		9	10	19	14	15
37e	Syphilis, unclassified	1	2	3	5	[illegible]	2
38a	Chancroidal infection	6	255	90	345	[illegible]	169
38b	Gonococcus infection	11	284	209	493	143	209
	Venereal (all)	27	607	321	928	181	417
	IV. GENERAL DISEASES (OTHER).						
36	Rickets						
39–45	Cancer and other malignant tumors.		3	1	4	1	
46	Tumors, benign	4	6	1	7	6	10
48a	Arthritis	6	17	6	23	16	6
48b	Gout	1					
49	Scurvy						
50	Diabetes, mellitus		1		1		
51a	Exophthalmic goiter (hyperthyroidism).		1		1	1	1
51b	Cretinism and myxedema						
52a	Addison's disease						
52b	Acromegaly						
53a	Leukemia						
53b	Hodgkin's disease						1
88	Goiter, simple		1		1	4	2
116	Spleen, diseases of						
53c	Other diseases of the ductless glands.						
54	Anæmia, chlorosis		1		1		
55a	Hemophilia						
55b	Obesity						
55c	Purpura						
55d	Muscular rheumatism	3	14		14	9	5
55e	General diseases, others		2	2	4	18	1
56a	Alcoholism (acute or chronic).	7	70	14	84	24	36
56b	Drug addiction	1		1	1		
57–59	Poisoning, chronic					1	
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
62	Locomotor ataxia		2		2		
63a	Multiple sclerosis						
63b	Spinal cord, diseases of (others).	1	4		4		1
64	Apoplexy						
66a	Facial paralysis						
66b	Paraplegia		1		1		
66c	Paraysis without specified cause (others).		2		2	1	
69	Epilepsy	1	6		6	5	7
74a	Jacksonian epilepsy						

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
321	2	323	16	.....	16	36	9	86	37
1	.....	1	.....	.....	.....	1	.....	.....	37a
47	1	48	6	.....	6	4	1	18	37b
258	1	259	7	.....	7	13	1	28	37c
13	.....	13	2	.....	2	11	7	37	37d
2	.....	2	1	.....	1	7	.....	3	37e
672	.....	672	41	7	48	14	7	26	38a
6	.....	6	72	12	84	111	70	77	38b
999	2	1,001	129	19	148	161	86	189	
2	.....	2	1	.....	1	2	.....	.....	36
.....	1	1	.....	.....	.....	1	.....	.....	39–45
867	6	873	.....	.....	.....	19	1	8	46
131	.....	131	11	.....	11	9	3	14	48a
.....	.....	.....	.....	.....	.....	.....	.....	.....	48b
.....	.....	.....	.....	.....	.....	.....	.....	.....	49
6	.....	6	.....	.....	.....	.....	.....	.....	50
8	.....	8	2	.....	2	2	.....	.....	51a
.....	.....	.....	.....	.....	.....	.....	.....	1	51b
.....	.....	.....	.....	.....	.....	.....	.....	.....	52a
.....	.....	.....	.....	.....	.....	.....	.....	.....	52b
.....	.....	.....	.....	.....	.....	.....	.....	.....	53a
.....	.....	.....	.....	.....	.....	.....	.....	.....	53b
10	.....	10	1	.....	1	.....	.....	.....	88
.....	.....	.....	.....	.....	.....	.....	.....	.....	116
2	.....	2	.....	.....	.....	.....	.....	.....	53c
1	.....	1	.....	.....	.....	6	.....	2	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	55a
.....	.....	.....	.....	.....	.....	.....	.....	.....	55b
.....	.....	.....	1	.....	1	.....	1	.....	55c
61	.....	61	6	1	7	19	2	1	55d
5	.....	5	.....	.....	.....	2	3	.....	55e
68	.....	68	3	.....	3	1	.....	5	56a
.....	.....	.....	.....	.....	.....	.....	1	.....	56b
.....	.....	.....	.....	.....	.....	.....	.....	.....	57–59
.....	1	1	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	61
.....	.....	.....	1	.....	1	.....	.....	.....	62
1	.....	1	.....	.....	.....	.....	.....	.....	63a
2	.....	2	.....	.....	.....	1	.....	1	63b
2	.....	2	.....	.....	.....	1	.....	.....	64
3	.....	3	.....	.....	.....	.....	.....	.....	66a
.....	.....	.....	.....	.....	.....	.....	.....	.....	66b
1	.....	1	2	.....	2	1	.....	1	66c
14	.....	14	.....	.....	.....	1	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	74a

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored	Color not stated.	Total.	
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—con.								
74b	Neurasthenia	2,495	2,486	322	2,031	47	86	2,164	9
74c	Enuresis	375	375	.....	329	40	6	375	.....
74d	Neurosis	70	69	8	57	1	3	61	1
74e	Neuro-circulatory asthenia (disordered action of the heart).	1,347	1,347	41	1,137	109	60	1,306	.....
74f	Shell shock (cause not given).	107	106	14	88	.....	4	92	1
72	Chorea	21	20	.....	19	.....	1	20	1
73a	Hysteria and results (psychoses excepted).	1,197	1,193	49	1,027	66	51	1,144	4
73b	Neuralgia	1,030	1,017	64	802	119	32	953	13
73c	Neuritis	1,438	1,417	164	1,109	91	53	1,253	21
73d	Speech, defective	21	21	2	18	1	.....	19	.....
74g	Nervous system, other diseases of.	1,198	1,178	269	824	62	23	909	20
	VI. MENTAL ALIENATION.								
67	General paralysis of the insane.	64	64	■	46	5	4	55	.....
68a	Constitutional psychopathic states.	904	904	29	828	20	27	875	.....
68b	Mental deficiency	1,235	1,229	3	1,076	127	23	1,226	6
68c	Malingering	70	68	.....	57	7	4	68	2
68d	Dementia præcox	931	921	11	829	64	17	910	10
68e	Psychasthenia	177	177	37	132	1	7	140	.....
68f	Psychoneurosis	573	573	61	476	17	19	512	.....
68g	Psychosis, alcoholic	151	151	12	132	3	4	139	.....
68h	Psychosis, manic depressive.	569	569	37	492	24	16	532	.....
68i	Psychosis (others)	867	862	35	698	102	27	827	5
	VII. EYES AND THEIR ANNEXA, DISEASES OF.								
75a	Refractive errors (all)	1,932	1,928	62	1,749	55	62	1,866	4
	(1) Astigmatism	765	764	38	680	19	27	726	1
	(2) Hyperopia	487	487	9	450	10	18	478	.....
	(3) Myopia	503	501	11	461	20	9	490	2
	(4) Defective vision (cause not stated).	177	176	4	158	6	8	172	1
75b	Strabismus	157	157	3	145	4	5	154	.....
75c	Leucoma	53	53	1	44	7	1	52	.....
75d	Cataract	112	111	5	99	3	4	106	1
75e	Trachoma	291	288	6	267	5	10	282	3
75f	Conjunctivitis (others)	2,996	2,918	116	2,399	308	95	2,802	78
75g	Pterygium	264	244	23	186	25	10	221	20
75h	Amblyopia	227	227	5	199	17	6	222	.....
75i	Amaurosis	16	15	.....	10	4	1	15	1
75j	Choroiditis	162	162	7	135	16	4	155	.....
75k	Iritis	518	517	39	386	73	19	478	1
75l	Keratitis	750	745	31	541	131	42	714	5
75m	Retinitis	124	124	10	103	7	4	114	.....
75n	Nystagmus	16	16	.....	15	1	.....	16	.....
75o	Glaucoma	24	24	3	20	1	.....	21	.....
75p	Eyelids, diseases of	478	473	14	414	34	11	459	5
75r	Eyes and annexa, other diseases of.	1,037	1,028	34	834	122	38	994	9

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers	Enlisted men.			Total officers and enlisted men.	Officers	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
186	1,080	27	1,107	1,293	124	852	20	86	958	1,082	74b
.....	161	19	180	180	.....	142	17	6	165	165	74c
4	27	.....	27	31	4	25	1	3	29	33	74d
15	275	13	288	303	26	862	96	60	1,018	1,044	74e
6	44	.....	44	50	8	42	.....	4	46	54	74f
.....	13	.....	13	13	.....	5	.....	1	6	6	72
27	462	25	487	514	22	535	41	51	627	649	73a
34	437	64	501	535	28	313	50	31	394	422	73b
106	459	40	499	605	54	590	49	53	692	746	73c
1	17	1	18	19	1	.....	.....	.....	.....	1	73d
236	497	33	530	766	32	292	27	23	342	374	74g
5	27	1	28	33	4	19	4	4	27	31	67
9	397	11	408	417	20	414	7	26	447	467	68a
2	543	54	597	599	1	491	72	23	586	587	68b
2	22	5	27	27	.....	26	.....	4	30	30	68c
7	538	40	578	585	3	264	21	17	302	305	68d
24	51	.....	51	75	12	75	1	7	83	95	68e
37	231	5	236	273	23	236	12	19	267	290	68f
5	37	2	39	44	7	84	1	4	89	96	68g
19	263	8	271	290	18	224	16	16	256	274	68h
8	200	19	219	227	27	486	83	26	595	622	68i
24	598	18	616	640	35	1,064	37	61	1,162	1,197	75a
13	173	5	178	191	23	468	14	27	509	532	(1)
2	143	1	144	146	7	290	9	18	317	324	(2)
6	182	6	188	194	4	250	14	9	273	277	(3)
3	100	6	106	109	1	56	.....	7	63	64	(4)
1	80	2	82	83	2	59	2	5	66	68	75b
.....	26	2	28	28	1	11	5	1	17	18	75c
2	55	2	57	59	3	44	1	4	49	52	75d
4	164	2	166	170	2	92	3	10	105	107	75e
45	1,040	122	1,162	1,207	67	1,242	179	95	1,516	1,583	75f
16	90	8	98	114	6	84	17	10	111	117	75g
2	83	8	91	93	3	112	9	6	127	130	75h
.....	3	.....	3	3	.....	5	4	1	10	10	75i
5	53	7	60	65	2	80	9	4	93	95	75j
20	198	38	236	256	19	182	35	18	235	254	75k
15	227	40	267	282	16	307	91	42	440	456	75l
5	50	4	54	59	5	48	3	4	55	60	75m
.....	9	1	10	10	.....	5	.....	.....	5	5	75n
1	8	1	9	10	2	11	.....	.....	11	13	75o
8	215	14	229	237	5	169	20	11	200	205	75p
22	343	54	397	419	11	470	67	38	575	586	75r

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—con.						
74b	Neurasthenia	12	23		23	2	43
74c	Enuresis		5	4	9	10	1
74d	Neurosis					1	3
74e	Neuro-circulatory asthenia (disordered action of the heart).						
74f	Shell shock (cause not given).						
72	Chorea		1		1		
73a	Hysteria and results (psychoses excepted).		6		6		2
73b	Neuralgia	2	13	5	18	4	7
73c	Neuritis	4	5	2	7	4	15
73d	Speech, defective						
74g	Nervous system, other diseases of.	1	8	2	10	2	15
	VI. MENTAL ALIENATION.						
67	General paralysis of the insane.						
68a	Constitutional psychopathic states.			2	2	3	4
68b	Mental deficiency		6	1	7	5	2
68c	Malingering		2	2	4		1
68d	Dementia præcox	1	1	3	4		3
68e	Psychasthenia	1	2		2	1	
68f	Psychoneurosis	1	4		4	2	
68g	Psychosis, alcoholic						3
68h	Psychosis, maniac depressive.						2
68i	Psychosis (others)		1		1	2	4
	VII. EYES AND THEIR ANNEXA, DISEASES OF.						
75a	Refractive errors (all)	3	5		5	4	
	(1) Astigmatism	2				2	
	(2) Hyperopia		3		3	2	
	(3) Myopia	1	2		2		
	(4) Defective vision (cause not stated).						
75b	Strabismus		4		4		
75c	Leucoma					1	
75d	Cataract						
75e	Trachoma		3		3		1
75f	Conjunctivitis (others)	4	12	5	17	10	11
75g	Pterygium	1	1		1	1	5
75h	Amblyopia					2	
75i	Amaurosis						
75j	Choroiditis					1	1
75k	Iritis		2		2	1	
75l	Keratitis		2		2	1	1
75m	Retinitis		2		2		1
75n	Nystagmus						
75o	Glaucoma					1	
75p	Eyelids, diseases of	1	4		4	7	5
75r	Eyes and annexa, other diseases of.	1	2	1	3	6	3

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
26		26	5		5		1	8	74b
10		10							74c
1		1						1	74d
									74e
2		2				1			74f
								1	72
20		20	2		2			4	73a
23	1	24	5		5	9	1	3	73b
34		34	2		2	11	2	8	73c
1		1							73d
9		9	1		1	18	2		74g
									67
10	1	11							68a
28		28	1		1	2	4		68b
4		4	2		2	1		1	68c
15		15	3		3	6	2	2	68d
3		3							68e
3		3							68f
7		7	1		1				68g
3		3							68h
4	1	5	1		1	2		3	68i
77	1	78	1		1	2		2	75a
36		36	1		1	1			(1)
12		12							(2)
27		27				1		1	(3)
2	1	3						1	(4)
2		2							75b
			6		6				75c
						1			75d
7		7				1	1	1	75e
78		78	6	2	8	58	12	8	75f
4		4	1		1	15	2	3	75g
2		2							75h
2		2					1		75i
									75j
1	1	2	2		2			1	75k
2		2	1		1	3	2		75l
2		2							75m
1		1							75n
									75o
12		12	1		1	4	1		75p
8		8	2		2	3	2	4	75r

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	VIII. EAR, DISEASES OF.								
76a	Otitis media	8,453	8,428	359	7,380	384	305	8,069	25
76b	Mastoiditis	344	343	9	293	30	11	334	1
76c	Otitis externa	363	354	23	307	9	15	331	9
76d	Defective hearing (cause not stated).	154	154	20	126	4	4	134	
76e	Ear, other diseases of	334	332	20	274	18	20	312	2
	IX. NASAL FOSSÆ, DISEASES OF.								
86a	Adenoids	171	171	6	157	4	4	165	
86b	Deviation of nasal septum and spurs.	1,873	1,870	348	1,470	14	38	1,522	3
86c	Nose, external deformity of.								
86d	Turbinate hypertrophy	312	308	24	257	12	15	284	4
86e	Sinusitis (all)	3,358	3,352	434	2,604	196	118	2,918	6
86f	Polypus nasal	136	136	22	104	5	5	114	
86g	Perforated nasal septum	10	10		9	1		10	
86h	Rhinitis (cause not stated)	9,423	9,385	521	7,970	780	114	8,864	38
86i	Nasal fossæ, other diseases of.	1,220	1,215	79	999	125	12	1,136	5
	X. THROAT, DISEASES OF.								
87a	Laryngitis, acute catarrhal	4,074	4,058	210	3,435	251	162	3,848	16
87b	Larynx, other diseases of	17	17	1	16			16	
100a	Tonsillitis, acute	40,379	40,260	1,759	34,750	3,154	597	38,501	119
100b	Tonsillitis, chronic	4,979	4,971	847	3,911	115	98	4,124	8
100c	Tonsils, focal infection from.	151	150	29	107	13	1	121	1
100d	Pharyngitis, acute catarrhal.	13,553	13,457	669	11,400	1,000	388	12,788	96
100e	Pharynx, other diseases of.	4,614	4,606	467	3,939	95	105	4,139	8
	XI. CIRCULATORY SYSTEM, DISEASES OF.								
77	Pericarditis	69	69	1	53	13	2	68	
.78	Endocarditis, acute	42	42	3	31	6	2	39	
79a	Valvular diseases of the heart.	2,970	2,954	109	2,452	316	77	2,845	16
	(1) Aortic insufficiency	297	297	13	234	42	8	284	
	(2) Aortic stenosis	46	46	1	37	6	2	45	
	(3) Mitral insufficiency	2,006	1,994	79	1,651	216	48	1,915	12
	(4) Mitral stenosis	416	414	11	350	42	11	403	2
	(5) Combined lesions, mitral aortic.	118	117	2	108	7		115	1
	(6) Pulmonic lesions	4	4		4			4	
	(7) Tricuspid lesions								
	(8) Valvular lesions, unclassified.	83	82	3	68	3	8	79	1
79b	Cardiac hypertrophy	148	148	10	111	20	7	138	
79c	Cardiac dilatation	71	70	11	47	7	5	59	1
79d	Myocarditis and myocardial insufficiency.	541	540	70	390	64	16	470	1
79e	Heart, other organic diseases of.	263	260	8	206	34	12	252	3
80	Angina pectoris	60	60	9	43	6	2	51	
81a	Aneurisms	27	27	2	21	4		25	

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		International classification No.
183	3,147	150	3,297	3,480	170	3,968	224	304	4,496	4,666	76a
4	141	6	147	151	5	148	24	11	183	188	76b
14	145	3	148	162	4	97	6	15	118	122	76c
19	99	3	102	121	1	24	1	4	29	30	76d
12	111	8	119	131	7	148	10	20	178	185	76e
5	69	3	72	77	.....	74	1	4	79	79	86a
288	945	3	948	1,236	47	469	7	37	513	560	86b
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86c
20	166	2	168	188	3	66	10	15	91	94	86d
169	855	65	920	1,089	255	1,686	127	118	1,931	2,186	86e
16	58	1	59	75	6	45	4	5	54	60	86f
.....	3	1	4	4	.....	6	.....	.....	6	6	86g
427	5,784	449	6,233	6,660	73	1,997	324	113	2,434	2,507	86h
66	846	107	953	1,019	12	141	17	12	170	182	86i
91	1,406	122	1,528	1,619	114	1,934	128	161	2,223	2,337	87a
1	4	.....	4	5	.....	4	.....	.....	4	4	87b
1,182	23,537	2,144	25,681	26,863	530	10,037	957	593	11,587	12,117	100a
716	2,801	66	2,867	3,583	117	1,009	45	96	1,150	1,267	100b
28	101	13	114	142	1	5	.....	1	6	7	100c
461	8,301	709	9,010	9,471	189	2,909	280	387	3,576	3,765	100d
217	1,733	39	1,772	1,989	243	2,090	52	105	2,247	2,490	100e
.....	20	8	28	28	1	32	5	2	39	40	77
1	10	5	15	16	2	20	1	2	23	25	78
60	1,471	145	1,616	1,676	46	921	168	76	1,165	1,211	79a
11	178	27	205	216	2	55	13	8	76	78	(1)
.....	23	3	26	26	1	14	3	2	19	20	(2)
39	904	85	989	1,028	37	702	130	47	879	916	(3)
7	231	23	254	261	4	112	19	11	142	146	(4)
2	94	6	100	102	.....	12	1	.....	13	13	(5)
.....	3	.....	3	3	.....	.....	.....	.....	.....	.....	(6)
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(7)
1	38	1	39	40	2	26	2	8	36	38	(8)
6	61	11	72	78	4	46	8	7	61	65	79b
7	27	3	30	37	4	13	4	2	19	23	79c
33	210	26	236	269	35	170	37	16	223	258	79d
3	96	19	115	118	5	102	15	12	129	134	79e
7	27	2	29	36	2	16	4	2	22	24	80
1	15	3	18	19	1	6	1	.....	7	8	81a

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	VIII. EAR, DISEASES OF.						
76a	Otitis media	6	16	8	24	32	2
76b	Mastoiditis		1		1		1
76c	Otitis external	5	19		19	2	7
76d	Defective hearing (cause not stated).					1	1
76e	Ear, other diseases of	1	1		1	5	
	IX. NASAL FOSSÆ, DISEASES OF.						
86a	Adenoids	1				11	
86b	Deviation of nasal septum and spurs.	13	5	4	9	15	25
86c	Nose, external deformity of						
86d	Turbinate hypertrophy	1	2		2	16	3
86e	Sinusitis (all)	10	8	3	11	5	5
86f	Polypus nasal						1
86g	Perforated nasal septum						
86h	Rhinitis (cause not stated)	21	25	5	31	19	50
86i	Nasal fossæ, other diseases of.	1	5	1	6	1	
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal	5	5		5	2	3
87b	Larynx, other diseases of						
100a	Tonsillitis, acute	47	91	44	135	92	102
100b	Tonsillitis, chronic	14	32	4	36	2	13
100c	Tonsils, focal infection from.						
100d	Pharyngitis, acute catarrhal.	19	35	9	44	25	12
100e	Pharynx, other diseases of	7	13	4	17	7	3
	XI. CIRCULATORY SYSTEM, DISEASES OF.						
77	Pericarditis		1		1		
78	Endocarditis, acute						
79a	Valvular diseases of the heart.	3	7	3	10	12	4
	(1) Aortic insufficiency			2	2		
	(2) Aortic stenosis						
	(3) Mitral insufficiency	3	6	1	7	10	2
	(4) Mitral stenosis					1	1
	(5) Combined lesions, mitral aortic.						1
	(6) Pulmonic lesions					1	
	(7) Tricuspid lesions						
	(8) Valvular lesions, unclassified.		1		1		
79b	Cardiac hypertrophy			1	1	1	
79c	Cardiac dilatation		1		1	1	
79d	Myocarditis and myocardial insufficiency.	2	2	1	3		
79e	Heart, other organic diseases of.		5		5	1	
80	Angina pectoris						
81a	Aneurisms						

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
162	1	163	27	2	29	6	4	15	76a
2		2						1	76b
8		8	1		1	5	2	2	76c
1		1							76d
9		9				1		1	76a
3		3							86a
11	1	12				1	2		86b
									86c
4		4					4		86d
41		41	4	1	5	3	2	1	86e
									86f
									86g
79	1	80	15	2	17	28	1	9	86h
5		5	1		1	5			86i
85	1	86		1	1	11	2	3	87a
8		8							87b
684	4	688	207	9	216	57	21	41	100a
46	2	48	8		8	4	2	2	100b
1		1				1			100c
87	1	88	31	2	33	52	4	40	100d
89		89	4		4	5	1	2	100e
									77
1		1							78
31	1	32	6		6	6	1	9	79a
1		1							(1)
									(2)
23	1	24	4		4	4	1	7	(3)
5		5				1		1	(4)
			1		1	1			(5)
									(6)
									(7)
2		2	1		1			1	(8)
3		3							79b
4	3	7	1		1	1			79c
6		6	2		2	1			79d
1		1	1		1	2		1	79e
									80
									81a

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XI. CIRCULATORY SYSTEM, DISEASES OF—contd.								
81b	Arterial sclerosis and hypertension.	92	88	31	52	4	1	57	4
81c	Aortitis	12	12	2	9	1	.....	10	.....
81d	Arteries, other diseases of	16	16	1	14	1	.....	15	.....
82	Embolism and thrombosis	46	46	8	33	4	1	38	.....
83a	Hemorrhoids	6,056	6,033	556	4,683	560	234	5,477	23
83b	Varicocele	1,914	1,904	83	1,705	65	51	1,821	10
83c	Varicose veins	1,040	1,033	63	917	31	22	970	7
83d	Phlebitis	184	184	17	156	8	3	167	.....
84a	Status lymphaticus	4	4	.....	3	1	.....	4	.....
84b	Lymphatic system, other diseases of.	2,903	2,842	120	2,139	494	89	2,722	61
85a	Cardiac arrhythmias	169	168	10	140	16	2	158	1
85b	Cardiac murmurs, not organic.	37	37	4	30	1	2	33	.....
85c	Cardiac disorders, functional.	412	412	23	369	20	.....	389	.....
85d	Bradycardia	8	6	.....	6	.....	.....	6	2
85e	Heart block	6	5	1	4	.....	.....	4	1
85f	Tachycardia	905	904	24	789	52	39	880	1
85g	Hemorrhage	142	139	15	107	13	4	124	3
85h	Circulatory system, other diseases of.	77	75	3	63	4	5	72	2
	XII. RESPIRATORY SYSTEM, DISEASES OF.								
89–90	Bronchitis	52,819	52,205	2,817	42,787	4,587	2,014	49,388	614
91	Pneumonia, broncho	5,935	5,925	215	4,506	940	264	5,710	10
92a	Pneumonia, lobar	5,544	5,498	168	3,441	1,689	200	5,330	46
92b	Pneumonia, unclassified	215	215	9	125	40	41	206	.....
93a	Pleurisy, suppurative	442	441	18	350	50	23	423	1
93b	Pleurisy, serofibrinous	1,679	1,669	53	1,368	193	55	1,616	10
93c	Pleura, other diseases of	2,992	2,972	112	2,364	378	118	2,860	20
96	Asthma	1,133	1,114	81	853	141	39	1,033	19
97	Pulmonary emphysema	59	59	4	43	8	4	55	.....
98	Lungs, other diseases of	159	158	10	123	11	14	148	1
	XIII. DIGESTIVE SYSTEM, DISEASES OF.								
99a	Pyorrhea alveolaris	568	567	58	466	19	24	509	1
99b	Abscess periapical, focal infection from.	42	42	2	36	3	1	40	.....
99c	Mouth and annexa, other diseases of.	3,349	3,308	297	2,608	272	131	3,011	41
101	Esophagus, diseases of	12	12	.....	12	.....	.....	12	.....
102a	Ulcer of the stomach	334	331	46	259	16	10	285	3
102b	Gastro-enteroptosis	156	156	25	125	3	3	131	.....
102c	Stomach, other diseases of	8,423	8,174	617	6,602	724	231	7,557	249
105a	Duodenal ulcer	186	186	47	131	4	4	139	.....
105b	Diarrhea	2,339	2,276	134	1,921	150	71	2,142	63
105c	Enteritis and colitis	6,922	6,844	487	5,560	468	329	6,357	78
106	Ankylostomiasis (uncinariasis, hookworm).	889	527	4	461	60	2	523	362
107a	Ascaris lumbricoides	167	62	1	40	20	1	61	105
107b	Cestodes	230	225	30	174	14	7	195	5
107c	Intestinal parasites, others	152	121	4	110	6	1	117	31
108	Appendicitis (all)	8,175	8,141	609	6,718	513	301	7,532	34
109a	Hernia	8,126	8,099	506	6,992	409	192	7,593	27

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
	Enlisted men.					Enlisted men.					
Officers	White.	Colored.	Total.	Total officers and enlisted men.	Officers	White.	Colored.	Color not stated.	Total.	Total officers and enlisted men.	
22	33	3	36	58	9	19	1	1	21	30	81b
1	2	1	3	4	1	7	.....	.....	7	8	81c
.....	2	1	3	3	.....	2	.....	.....	2	2	81d
4	18	2	20	24	3	15	2	1	18	21	82
379	1,823	195	2,018	2,397	158	2,679	354	234	3,267	3,425	83a
52	807	22	829	881	25	827	40	50	917	942	83b
48	515	19	534	582	14	373	12	22	407	421	83c
12	98	5	103	115	5	50	3	3	56	61	83d
.....	1	1	2	2	.....	1	.....	.....	1	1	84a
52	1,059	294	1,353	1,405	65	943	186	88	1,217	1,282	84b
5	95	8	103	108	5	37	6	2	45	50	85a
1	24	1	25	26	.....	4	.....	2	6	6	85b
11	350	18	368	379	12	.....	.....	.....	.....	12	85c
.....	.....	.....	.....	.....	.....	4	.....	.....	4	4	85d
1	4	.....	4	5	.....	.....	.....	.....	.....	.....	85e
9	385	22	407	416	15	380	29	39	448	463	85f
13	70	8	78	91	2	36	5	4	45	47	85g
1	34	2	36	37	1	28	2	5	35	36	85h
1,441	18,747	1,753	20,500	21,941	1,280	22,450	2,791	2,011	27,252	28,532	89–90
70	1,159	258	1,417	1,487	142	3,257	677	263	4,197	4,339	91
36	846	517	1,363	1,399	128	2,437	1,162	200	3,799	3,927	92a
4	43	18	61	65	5	82	22	41	145	150	92b
6	177	21	198	204	11	172	29	23	224	235	93a
15	257	39	296	311	37	1,072	153	55	1,280	1,317	93b
67	1,103	138	1,241	1,308	44	1,176	232	117	1,525	1,569	93c
43	461	56	517	560	34	376	80	38	494	528	96
1	17	7	24	25	3	26	1	4	31	34	97
6	69	4	73	79	2	51	6	14	71	73	98
26	120	10	130	156	31	309	9	24	342	373	99a
2	27	2	29	31	.....	9	1	1	11	11	99b
111	934	87	1,021	1,132	180	1,544	183	130	1,857	2,037	99c
.....	6	.....	6	6	.....	6	.....	.....	6	6	101
22	101	4	105	127	23	149	10	9	168	191	102a
17	70	.....	70	87	7	54	3	3	60	67	102b
371	3,617	277	3,894	4,265	246	2,591	360	231	3,182	3,428	102c
29	72	.....	72	101	18	57	4	4	65	83	105a
61	737	52	789	850	33	810	60	71	941	974	105b
230	1,731	118	1,849	2,079	233	3,342	334	328	4,004	4,237	105c
3	426	56	482	485	1	30	1	2	33	34	106
.....	16	.....	16	16	1	18	1	1	20	21	107a
18	73	5	78	96	11	97	7	7	111	122	107b
1	80	1	81	82	1	17	1	1	19	20	107c
324	2,715	163	2,878	3,202	257	3,712	299	301	4,312	4,569	108
371	3,952	175	4,127	4,498	127	2,908	228	189	3,325	3,452	109a

TABLE XV.—*Admissions, United States Army*, 1919—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XI. CIRCULATORY SYSTEM, DISEASES OF—contd.						
81b	Arterial sclerosis and hypertension.						
81c	Aortitis						
81d	Arteries, other diseases of	1				10	
82	Embolism and thrombosis	1					
83a	Hemorrhoids	19	42	11	53	15	31
83b	Varicocele	6	16	2	18	12	18
83c	Varicose veins	1	2		2	6	4
83d	Phlebitis						5
84a	Status lymphaticus						
84b	Lymphatic system, other diseases of.	3	17	14	31	8	62
85a	Cardiac arrhythmias		2	2	4		
85b	Cardiac murmurs, not organic.	3				1	1
85c	Cardiac disorders, functional.		9	2	11	1	2
85d	Bradycardia		1		1		
85e	Heart block						
85f	Tachycardia		1	1	2	12	2
85g	Hemorrhage						
85h	Circulatory system, other diseases of.	1	1		1		
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89–90	Bronchitis	96	175	32	207	185	165
91	Pneumonia, broncho	3	2	2	4	3	1
92a	Pneumonia, lobar	4	15	2	17	15	
92b	Pneumonia, unclassified						
93a	Pleurisy, suppurative	1					
93b	Pleurisy, serofibrinous	1	8	1	9		3
93c	Pleura, other diseases of	1	12	8	20	10	5
96	Asthma	4	2	5	7	4	4
97	Pulmonary emphysema						
98	Lungs, other diseases of	2	2	1	3		1
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99a	Pyorrhea alveolaris	1	1		1	1	2
99b	Abscess periapical, focal infection from.						
99c	Mouth and annexa, other diseases of.	6	44	2	46	8	8
101	Esophagus, diseases of						
102a	Ulcer of the stomach	1	1	1	2	2	
102b	Gastro-enteroptosis	1					
102c	Stomach, other diseases of		98	86	184	46	68
105a	Duodenal ulcer						2
105b	Diarrhea	40	37	38	75	7	9
105c	Enteritis and colitis	24	103	11	114	18	15
106	Ankylostomiasis (uncinariasis, hookworm).		3	3	6		2
107a	Ascaris lumbricoides		5	19	24		
107b	Cestodes	1		2	2	2	
107c	Intestinal parasites, other	2	12	4	16		1
108	Appendicitis (all)	28	55	50	105	69	65
109a	Hernia	8	22	4	26	10	

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
						4			81b
									81c
									81d
									82
90		90	3		3	10	11	2	83a
21	1	22	4	1	5	7	1	2	83b
16		16	1		1	3	1	3	83c
3		3							83d
1		1							84a
39	1	40	11		11	26	4	31	84b
6		6				1			85a
									85b
6		6	1		1				85c
			1		1	2			85d
						1			85e
8		8	1		1			1	85f
1		1				[illegible]		1	85g
						2			85h
920	3	923	145	11	156	309	95	210	89–90
50	1	51	34	3	37	8		2	91
101		101	27	8	35	29	14	3	92a
									92b
			1		1	1			93a
26		26	2		2	6		4	93b
41	1	42	17		17	18		2	93c
5	1	6	1		1	10	4	5	96
									97
						1			98
32		32	1		1			1	99a
									99b
65	1	66	5		5	23	4	14	99c
									101
5	1	6	1	1	2		2	1	102a
1		1							102b
145		145	37	1	38	179	42	28	102c
									105a
312		312	[illegible]		9	55	6	2	105b
303	1	304	48	5	53	42	2	34	105c
						114		248	
1		1				102		3	107a
2		2				5			107b
						24		7	107c
84		84	17	1	18	8	21	5	108
92	3	95	8	2	10	6	1	20	109a

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XIII. DIGESTIVE SYSTEM, DISEASES OF—contd.								
109b	Intestinal obstruction	153	147	12	125	7	3	135	6
110a	Fistula in ano	718	715	32	577	72	34	683	3
110b	Intestines, other diseases of	11,387	10,661	763	8,680	1,068	150	9,898	726
113	Cirrhosis of the liver	29	27	3	20	4		24	2
114	Cholelithiasis	93	91	21	65	5		70	2
115a	Cholecystitis	727	725	96	560	44	25	629	2
115b	Gall bladder and bile duct, other diseases of	1,304	1,295	375	825	61	34	920	9
115c	Liver, other diseases of	243	227	28	185	11	3	199	16
117b	Peritoneal adhesions	535	535	36	443	36	20	499	
118a	Pancreatitis	4	4	1	3			3	
118b	Visceroptosis	39	38	2	35	1		36	1
118c	Digestive system, other diseases of	110	107	11	79	10	7	96	3
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).								
119	Nephritis, acute	602	599	30	497	27	45	569	3
120	Nephritis, chronic	1,237	1,235	67	1,048	78	42	1,168	2
122a	Abscess perinephritic	18	18	1	16		1	17	
122b	Nephroptosis	24	24	1	22	1		23	
122c	Hydronephrosis	14	13		13			13	1
122d	Pyogenic infection of the kidneys	247	247	26	197	22	2	221	
122e	Kidney and adnexa, other diseases of	341	338	52	239	36	11	286	3
123	Nephrolithiasis	407	407	55	323	15	14	352	
124a	Cystitis	732	724	58	555	81	30	666	8
124b	Bladder, other diseases of	270	269	3	216	42	8	266	1
125a	Urethritis (nonvenereal)	1,439	1,432	62	1,182	153	35	1,370	7
125b	Stricture (nonvenereal)	160	159	5	119	27	8	154	1
125c	Urethra other diseases of	13	13	2	9	2		11	
126	Prostate, diseases of	235	235	41	174	14	6	194	
127a	Balanitis	506	504	23	410	56	15	481	2
127b	Epididymitis (nonvenereal)	700	690	36	548	75	31	654	10
127c	Hydrocele	510	490	26	425	33	6	464	20
127d	Warts, external genital organs	353	352	11	292	37	12	341	1
127e	Genito-urinary system, other diseases of (nonvenereal)	2,378	2,354	68	2,023	183	80	2,286	24
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.								
142	Gangrene	8	7		4	2	1	7	1
143a	Carbuncle	587	577	60	484	12	21	517	10
143b	Furuncle	4,308	4,175	176	3,767	132	100	3,999	133
144a	Abscess	3,278	3,154	152	2,674	235	93	3,002	124
144b	Cellulitis	2,549	2,465	125	2,182	98	60	2,340	84
145a	Trichophytoses	1,270	1,156	34	1,044	63	15	1,122	114
145b	Nails, defects and diseases of	1,327	1,297	48	1,183	35	31	1,249	30
145c	Ectoparasites	685	683	12	603	47	21	671	2
145d	Clavus	3	3		2	1		3	
145e	Dermatitis	252	244	15	214	10	5	229	8

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
	Enlisted men.					Enlisted men.					
Officers.	White.	Colored.	Total.	Total officers and enlisted men.	Officers.	White.	Colored.	Color not stated.	Total.	Total officers and enlisted men.	
9	57	6	63	72	3	47	1	3	51	54	109b
.....	241	23	264	264	32	318	47	34	399	431	110a
576	5,615	535	6,150	6,726	133	1,998	376	149	2,523	2,656	110b
1	8	.....	8	9	2	11	4	.....	15	17	113
8	26	.....	26	34	13	37	4	.....	41	54	114
52	215	21	236	288	41	316	20	25	361	402	115a
32	314	31	345	377	342	486	27	34	547	889	115b
19	133	6	139	158	5	36	5	3	44	49	115c
18	183	13	196	214	17	241	21	20	282	299	117b
1	1	.....	1	2	.....	2	.....	.....	2	2	118a
1	25	1	26	27	1	9	.....	.....	9	10	118b
8	43	3	46	54	2	33	7	7	47	49	118c
8	118	9	127	135	20	364	15	45	424	444	119
30	269	18	287	317	33	757	59	42	858	891	120
1	10	.....	10	11	.....	5	.....	1	6	6	122a
1	9	.....	9	10	.....	10	1	.....	11	11	122b
.....	9	.....	9	9	.....	4	.....	.....	4	4	122c
13	109	17	126	139	13	79	4	2	85	98	122d
33	106	15	121	154	16	119	21	11	151	167	122e
30	138	2	140	170	24	168	13	14	195	219	123
22	214	26	240	262	33	317	50	30	397	430	124a
2	77	17	94	96	1	131	25	8	164	165	124b
28	625	104	729	757	34	521	49	35	605	639	125a
4	52	8	60	64	1	67	17	8	92	93	125b
1	.....	2	2	3	1	8	.....	.....	8	9	125c
20	84	9	93	113	21	89	4	6	99	120	126
11	220	35	255	266	11	174	20	15	209	220	127a
17	262	39	301	318	17	269	36	31	336	353	127b
16	236	17	253	269	9	178	16	6	200	209	127c
6	209	24	233	239	5	76	7	12	95	100	127d
31	534	86	620	651	35	665	89	80	834	869	127e
.....	2	.....	2	2	.....	2	2	1	5	5	142
31	268	3	271	302	29	197	9	21	227	256	143a
117	2,355	71	2,426	2,543	50	1,202	41	97	1,340	1,390	143b
80	1,390	113	1,503	1,583	65	1,116	112	91	1,319	1,384	144a
77	1,011	49	1,060	1,137	45	1,023	46	59	1,128	1,173	144b
27	732	22	754	781	5	196	18	14	228	233	145a
23	706	16	722	745	21	360	16	31	407	428	145b
8	324	39	363	371	4	257	8	21	286	290	145c
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145d
8	130	5	135	143	6	61	5	5	71	77	145e

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XIII. DIGESTIVE SYSTEM. DISEASES OF—con.						
109b	Intestinal obstruction		1		1	2	16
110a	Fistula in ano		3	2	5	2	6
110b	Intestines, other diseases of.	54	341	144	485	126	270
113	Cirrhosis of the liver						
114	Cholelithiasis		1		1	1	
115a	Cholecystitis	3	7	1	8	4	3
115b	Gall bladder and bile duct, other diseases of.	1	4	3	7	2	1
115c	Liver, other diseases of	4	5		5		3
117b	Peritoneal adhesions	1	3	2	5	4	1
118a	Pancreatitis						
118b	Visceroptosis						
118c	Digestive system, other diseases of.	1	1		1	1	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NON-VENEREAL).						
119	Nephritis, acute	2	1	1	2		
120	Nephritis, chronic	4	1	1	2	6	7
122a	Abscess perinephritic						
122b	Nephroptosis						
122c	Hydronephrosis						
122d	Pyogenic infection of the kidneys.		1	1	2	3	1
122e	Kidney and annexa, other diseases of.	3	3		3	4	2
123	Nephrolithiasis	1	4		4	2	3
124a	Cystitis	3	4	5	9	5	5
124b	Bladder, other diseases of					3	
125a	Urethritis (nonvenereal)		3		3	12	5
125b	Stricture (nonvenereal)			1	1		
125c	Urethra, other diseases of						1
126	Prostate, diseases of			1	1		
127a	Balanitis	1	1	1	2	6	2
127b	Epididymitis (nonvenereal).	2	5		5		3
127c	Hydrocele	1	1		1	5	2
127d	Warts, external genital organs.			6	6	2	
127e	Genito-urinary system, other diseases of (nonvenereal).	2	3	6	9	3	2
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.						
142	Gangrene						
143a	Carbuncle		1		1	3	1
143b	Furuncle	9	32	20	52	39	61
144a	Abscess	7	14	10	24	42	42
144b	Cellulitis	3	46	2	48	13	50
145a	Trichophytoses	2	33	23	56	18	56
145b	Nails, defects and diseases of.	4	13	3	16	32	43
145c	Ectoparasites		1		1		1
145d	Clavus		2	1	3		
145e	Dermatitis	1				1	7

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
			2		2	5	1		109b
7		7				2		1	110a
270	1	271	60	13	73	498	34	194	110b
			1		1	1		1	113
				1	1	1		1	114
12		12	3	2	5		1	1	115a
16		16	2		2	3		6	115b
8		8				3		13	115c
7		7	4		4				117b
									118a
1		1						1	118b
			1		1	1		2	118c
10		10	4	2	6	3			119
6		6	2		2	2			120
1		1							122a
3		3							122b
						1			122c
4		4							122d
1		1	4		4	2		1	122e
5		5	3		3				123
8		8	2		2	4	1	3	124a
2		2	3		3	1			124b
15		15	1		1	3	4		125a
				1	1	1			125b
									125c
1		1							126
5		5	2		2	1	1		127a
8		8	1		1	2	4	4	127b
3		3					1	19	127c
5		5				1			127d
803		803	13	2	15	13	1	10	127e
						1			142
12		12	2		2	8		2	143a
72	3	75	6		6	104	1	28	143b
56	2	58	14		14	65	11	48	144a
27	1	28	12	1	13	56	7	21	144b
9	1	10				102	4	8	145a
29		29				20	3	7	145b
17		17	3		3	2			145c
									145d
14		14	1		1	4	4		145e

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF—con.								
145f	Eczema	1,160	1,141	63	995	46	37	1,078	19
145g	Erythema	345	342	13	302	13	14	329	3
145h	Herpes	897	884	28	726	101	29	856	13
145i	Impetigo	962	961	41	859	27	34	920	1
145j	Lichen	19	19	1	15	2	1	18	
145k	Nævus	21	21	2	17	1	1	19	
145l	Pityriasis	133	133	7	122	2	2	126	
145m	Psoriasis	466	463	21	423	3	16	442	3
145n	Scabies	16,135	16,104	790	14,362	335	617	15,314	31
145o	Skin and cellular tissue, other diseases of.	4,500	4,409	213	3,738	266	192	4,196	91
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.								
146a	Osteomyelitis	178	178	6	152	14	6	172	
146b	Fractures, faulty union of	518	517	3	461	28	25	514	1
146c	Bones, other diseases of	515	510	31	414	42	23	479	5
147a	Ankylosis of joint	270	269	9	245	11	4	260	1
147b	Loose bodies in joint	12	12		11	1		12	
147c	Synovitis	450	448	29	360	43	16	419	2
147d	Floating cartilage	55	55	2	49	1	3	53	
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).	162	161	11	137	7	6	150	1
149a	Hallux valgus	339	337	8	281	41	7	329	2
149b	Hammertoe	166	159	4	146	7	2	155	7
149c	Metatarsalgia	179	179	10	152	9	8	169	
149d	Myositis	977	968	48	791	103	26	920	9
149e	Pes planus	4,332	4,326	60	3,850	271	145	4,266	6
149f	Talipes	55	55	1	50	2	2	54	
149g	Tenosynovitis	329	323	13	288	12	10	310	6
149h	Organs of locomotion, other diseases of.	4,890	4,848	200	4,016	477	155	4,648	42
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.								
150	Congenital malformations	429	419	44	338	25	12	375	10
189	Not specified or ill-defined diseases.	22,258	21,985	1,144	17,600	2,336	905	20,841	273
	Total for diseases	558,202	551,691	27,654	447,978	53,472	22,587	524,037	6,511
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.								
1	Bites	149	147	6	124	11	6	141	2
2	Burns	1,637	1,617	61	1,380	97	79	1,556	20
3	Burns, chemical and X-ray.	387	385	13	339	21	12	372	
4	Compression (brain)	1	1		1			1	
5	Concussion (brain)	387	380	40	292	19	29	340	7
6	Contusion	7,915	7,808	305	6,432	755	316	7,503	137
7	Crushing	307	306	43	208	26	29	263	1
8	Dermatitis from traumatism.	869	865	68	770	14	13	797	4

TABLE XV.—*Admissions, United States Army, 1919*—Continued

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).						United States Army in Europe (excluding Russia).					Office classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
34	526	20	546	580	26	411	26	37	474	500	145f
10	179	3	182	192	3	106	10	14	130	133	145g
12	400	52	452	464	15	286	48	29	363	378	145h
15	390	11	401	416	26	444	16	34	494	520	145i
1	9	2	11	12	.....	5	.....	1	6	6	145j
2	8	1	9	11	.....	6	.....	1	7	7	145k
4	71	.....	71	75	3	42	2	2	46	49	145l
10	151	3	154	164	10	267	.....	16	283	293	145m
349	5,711	55	5,766	6,115	439	8,514	280	617	9,411	9,850	145n
105	1,851	139	1,990	2,095	103	1,675	110	190	1,975	2,078	145o
3	94	6	100	103	3	54	8	5	67	70	146a
2	263	16	279	281	1	181	12	25	218	219	146b
16	187	15	202	218	15	214	26	23	263	278	146c
7	208	5	213	220	2	36	5	4	45	47	147a
.....	8	1	9	9	.....	3	.....	.....	3	3	147b
12	186	24	210	222	16	166	19	16	201	217	147c
.....	32	1	33	33	2	16	.....	3	19	21	147d
4	80	2	82	86	7	51	5	6	62	69	147e
6	144	12	156	162	2	128	29	7	164	166	149a
2	72	2	74	76	2	64	5	2	71	73	149b
5	76	5	81	86	5	68	4	8	80	85	149c
33	322	29	351	384	14	421	71	26	518	532	149d
29	2,013	116	2,129	2,158	28	1,704	155	144	2,003	2,031	149e
1	34	2	36	37	.....	11	.....	2	13	13	149f
6	161	9	170	176	6	114	3	10	127	133	149g
117	2,274	212	2,486	2,603	72	1,554	246	151	1,951	2,023	149h
32	145	8	153	185	10	181	17	12	210	220	150
680	11,420	1,441	12,861	13,541	408	5,236	779	898	6,913	7,321	189
14,519	213,590	25,707	239,297	253,816	12,233	213,261	26,370	22,511	262,142	274,375	
4	60	5	65	69	2	57	5	6	68	70	1
39	655	41	696	735	22	660	54	79	793	815	2
7	209	7	216	223	6	114	12	12	138	144	3
.....	.....	.....	.....	.....	.....	1	.....	.....	1	1	4
23	139	6	145	168	14	142	13	28	183	197	5
167	3,280	324	3,604	3,771	136	2,893	404	315	3,612	3,748	6
36	86	8	94	130	7	119	18	29	166	173	7
55	580	8	588	643	13	135	4	13	152	165	8

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF—CON.						
145f	Eczema	3	9		9	4	15
145g	Erythema		1		1	4	2
145h	Herpes	1	8	1	9	4	4
145i	Impetigo		1		1	5	6
145j	Lichen						
145k	Nevus		1		1		
145l	Pityriasis		1		1	3	1
145m	Psoriasis	1					1
145n	Scabies	2	5		5		9
145o	Skin and cellular tissue, other diseases of.	5	37	17	54	28	70
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis		1		1	1	1
146b	Fractures, faulty union of		2		2	1	
146c	Bones, other diseases of		2	1	3	0	3
147a	Ankylosis of joint			1	1	1	
147b	Loose bodies in joint						
147c	Synovitis	1	2		2	1	
147d	Floating cartilage						
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).		3		3	1	
149a	Hallux valgus		2		2		1
149b	Hammertoe					7	1
149c	Metatarsalgia						1
149d	Myositis	1	5	3	8		
149e	Pes planus	3	16		16	29	6
149f	Talipes		3		3		
149g	Tenosynovitis	1				5	
149h	Organs of locomotion, other diseases of.	11	27	19	46	26	26
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.						
150	Congenital malformations	2	2		2	5	2
189	Not specified or ill-defined diseases.	56	139	111	250	136	172
	Total for diseases	902	3,232	1,250	4,482	1,820	2,923
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
1	Bites		1	1	2	2	1
2	Burns		6	2	8	11	13
3	Burns, chemical and X-ray		5	2	7	1	4
4	Compression (brain)						
5	Concussion (brain)	3				8	
6	Contusion	2	44	26	70	112	43
7	Crushing					1	
8	Dermatitis from traumatism.		12	2	14	24	10

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.						
White.	Color not stated.	Total.	White.	Colored.	Total.	Philippine Scouts.	Hawaiian.	Porto Ricans.	
24		24	6		6	13	3	3	145f
8		8	2		2	2	1		145g
23		23	1		1	7	3	3	145h
10		10	6		3	1			145i
			1		1				145j
2		2							145k
1		1							145l
4		4				3			145m
77		77	46		46	11	18	2	145n
67	2	69	10		10	59	16	16	145o
1	1	2							146a
13		13	1		1		1		146b
1		1	1		1	2	2	1	146c
						1			147a
									147b
4		4	1		1	2			147c
1		1							147d
1		1	1		1			1	147e
6		6				1		1	149a
2		2						7	149b
7		7							149c
38		38	5		5	7	2		149d
75	1	76	7		7		4	2	149e
2		2							149f
8		8				2	4		149g
104	4	108	5		5	30	5	7	149h
3		3				5		5	150
343	7	350	154	5	159	184	32	57	189
10,947	76	11,023	2,205	145	2,350	4,091	688	1,732	
3		3				1		1	1
31		31	4		4	11	4	5	2
5		5	1		1			2	3
									4
2	1	3	1		1	2	4	1	5
43	1	44	17	1	18	79	19	39	6
2		2					1		7
8		8	1		1	4			8

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES—continued.								
9	Dislocation of joint	1,044	1,030	52	862	74	42	978	14
10	Dislocation, articular, cartilage of knee.	204	203	16	174	7	6	187	1
11	Drowning (except suicides)	99	98	4	82	5	7	94	1
12	Epiphyseal separation	35	35	1	33	.....	1	34	.....
13	Eye and annexa, traumatisms.	532	522	16	413	58	35	506	10
14	Foreign bodies	346	345	6	281	44	14	339	1
15	Fracture, simple	9,376	9,315	474	7,943	521	377	8,841	61
16	Fracture, compound	1,489	1,478	95	1,159	128	96	1,383	11
17	Fracture, faulty union	14	14	2	11	1	.....	12	.....
18	Gases deleterious, absorption of.	143	142	12	105	15	10	130	1
19	Gunshot wound	.....	.....	.....	.....	.....	.....	.....	.....
20	Hemorrhage and results	77	71	3	61	6	1	68	6
21	Homicides	38	38	3	24	4	7	35	.....
22	Poisoning by food	467	465	37	388	31	9	428	2
23	Poisoning, other acute	198	196	13	166	11	6	183	2
24	Secondary result of injury.	371	370	22	288	31	29	348	1
25	Sprain of joint	9,622	9,478	313	8,179	696	290	9,165	144
26	Strain	1,993	1,966	60	1,712	135	59	1,906	27
27	Suicide	142	136	17	103	2	14	119	6
28	Synovitis, traumatic, cause undetermined.	708	705	45	575	60	25	660	3
29	Venomous bites and stings	197	185	8	167	6	4	177	12
30	Wounds, multiple	1,115	1,107	82	837	89	99	1,025	8
31	Wounds, penetrating	659	657	22	606	29	.....	635	2
33	Wounds, perforating	370	370	17	280	55	18	353	.....
34	Wounds, others	13,936	13,573	424	10,886	1,685	578	13,149	363
35	Traumatisms, others	4,577	4,452	212	3,861	247	132	4,240	125
	Total for diseases	558,202	551,691	27,654	447,978	53,472	22,587	524,037	6,511
	Total for external causes.	59,434	58,460	2,492	48,742	4,883	2,343	55,968	974
	Grand total	617,636	610,151	30,146	496,720	58,355	24,930	580,005	7,485
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.								
1	Knife	900	883	26	722	132	3	857	17
2	Pistol ball	745	738	39	563	100	36	699	7
3	Rifle ball	596	591	17	421	100	53	574	5
4	Shotgun	54	54	2	41	8	3	52	.....
5	Cutting and piercing instruments, others.	3,332	3,244	62	2,755	361	66	3,182	88
6	Other military agents	1,018	1,007	41	650	118	198	966	11
7	Sinking ships	2	2	.....	2	.....	.....	2	.....
8	Air machines	521	521	234	276	2	9	287	.....
9	Automobiles	3,444	3,422	243	2,934	108	137	3,179	22
10	Motorcycles	2,021	2,016	205	1,741	40	30	1,811	5
11	Railroad accidents	763	760	16	576	72	96	744	3
12	Street-car accidents	187	182	10	159	7	6	172	5
13	Other vehicles	1,779	1,752	49	1,455	169	79	1,703	27
14	Animals	2,108	2,064	41	1,807	141	75	2,023	44
15	Conflagrations	17	17	2	13	.....	2	15	.....
16	Crushing	1,940	1,910	60	1,589	220	41	1,850	30
17	Electricity	52	52	3	44	4	1	49	.....

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	Office classification.
	White.	Colored	Total.			White.	Colored.	Color not stated.	Total.		
32	425	28	453	485	17	409	40	42	491	508	9
8	78	2	80	88	8	90	5	6	101	109	10
4	50	3	53	57	.....	21	2	7	30	30	11
.....	20	.....	20	20	1	9	.....	1	10	11	12
9	202	23	225	234	7	191	31	35	257	264	13
3	134	15	149	152	3	133	29	14	176	179	14
235	2,984	167	3,151	3,386	227	4,609	343	376	5,328	5,555	15
48	370	37	407	455	47	732	90	95	917	964	16
2	3	1	4	6	.....	8	.....	.....	8	8	17
5	21	1	22	27	7	83	14	10	107	114	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
3	40	4	44	47	.....	17	2	1	20	20	20
2	10	2	12	14	1	12	2	7	21	22	21
21	273	9	282	303	15	46	2	9	57	72	22
7	92	5	97	104	6	63	6	6	75	81	23
10	164	14	178	188	11	110	17	17	144	155	24
190	4,555	393	4,948	5,138	116	3,016	255	289	3,560	3,676	25
43	1,050	76	1,126	1,169	16	528	57	53	638	654	26
8	66	2	68	76	9	29	.....	14	43	52	27
27	235	25	260	287	18	321	35	25	381	399	28
4	99	3	102	106	4	43	2	3	48	52	29
46	294	24	318	364	36	511	63	99	673	709	30
6	166	29	195	201	15	416	.....	.....	416	431	31
13	114	25	139	152	4	139	29	18	186	190	33
238	6,560	699	7,259	7,497	176	3,511	846	578	4,935	5,111	34
129	2,243	75	2,318	2,447	77	1,314	129	132	1,575	1,652	35
14,519	213,590	25,707	239,297	253,816	12,233	213,261	26,370	22,511	262,142	274,375	
1,424	25,257	2,061	27,318	28,742	1,021	20,482	2,509	2,319	25,310	26,331	
15,943	238,847	27,768	266,615	282,558	13,254	233,743	28,879	24,830	287,452	300,706	
3	441	67	508	511	22	236	56	3	295	317	1
25	213	40	253	278	14	317	59	36	412	426	2
4	130	26	156	160	13	244	71	50	365	378	3
2	31	6	37	39	.....	8	2	3	13	13	4
29	1,665	187	1,852	1,881	31	888	158	64	1,110	1,141	5
14	177	20	197	211	27	440	97	193	730	757	6
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	7
194	214	1	215	409	37	60	1	9	70	107	8
143	1,502	56	1,558	1,701	98	1,364	50	137	1,551	1,649	9
68	731	23	754	822	136	961	16	30	1,007	1,143	10
6	135	9	144	150	10	418	62	96	576	586	11
9	118	5	123	132	1	39	2	6	47	48	12
19	657	52	709	728	29	759	115	79	953	982	13
27	1,035	84	1,119	1,146	13	671	27	75	773	786	14
2	10	.....	10	12	.....	3	.....	2	5	5	15
31	907	88	995	1,026	27	595	112	41	748	775	16
1	17	.....	17	18	2	26	4	1	31	33	17

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	TRAUMATISM PRODUCED BY EXTERNAL CAUSES—con.						
9	Dislocation of joint	3	5	6	11	4	1
10	Dislocation, articular, cartilage of knee.						2
11	Drowning (except suicides)		1		1	1	2
12	Epiphyseal separation					3	
13	Eye and annexa, traumatisms.		4	4	8	5	3
14	Foreign bodies		2		2	4	
15	Fracture, simple	12	34	8	42	95	86
16	Fracture, compound		4	1	5	14	8
17	Fracture, faulty union						
18	Gases deleterious, absorption of.						
19	Gunshot wound						
20	Hemorrhage and results		1		1	1	
21	Homicides						2
22	Poisoning by food	1	64	20	84		2
23	Poisoning, other acute		4		4	4	1
24	Secondary result of injury	1	2		2	3	3
25	Sprain of joint	7	86	47	133	125	126
26	Strain	1	20	2	22	25	18
27	Suicide		2		2	1	2
28	Synovitis, traumatic, cause undetermined		2		2	2	1
29	Venomous bites and stings		7	1	8	3	10
30	Wounds, multiple		6	2	8	1	9
31	Wounds, penetrating	1				2	3
33	Wounds, perforating		3		3	2	5
34	Wounds, others	10	121	138	259	142	258
35	Traumatisms, others	6	42	43	85	54	70
	Total for diseases	902	3,232	1,250	4,482	1,820	2,923
	Total for external causes.	47	478	305	783	650	688
	Grand total	949	3,710	1,555	5,265	2,470	3,611
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.						
1	Knife	1	5	9	14	14	15
2	Pistol ball			1	1	4	9
3	Rifle ball		3	2	5	5	5
4	Shotgun						1
5	Cutting and piercing instruments (other).	2	35	16	51	41	60
6	Other military agents		3		3	2	7
7	Sinking ships					1	
8	Air machines	3				1	1
9	Automobiles	2	9	2	11	22	31
10	Motor cycles	1	8	1	9	23	12
11	Railroad accidents		1	1	2		1
12	Street car accidents		1		1	1	
13	Other vehicles	1	2	2	4	8	14
14	Animals	1	11	30	41	41	25
15	Conflagrations						
16	Crushing	2	6	20	26	40	20
17	Electricity					1	

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
9		9	4		4	8	3	3	9
3		3	1		1			1	10
6		6	1		1		1		11
1		1							12
8		8				6		4	13
						4			
8		8					1		14
98	1	99	37	3	40	26	18	17	15
27	1	28	4		4	5	3	3	16
									17
1		1				1			18
									19
1		1	1		1	5		1	20
									21
2		2	1		1	2			22
2		2				2			23
6	12	18				1			24
241	1	242	30	1	31	101	19	24	25
65	6	71	6		6	18	3	6	26
3		3				1	1	4	27
12		12	2		2	1	1	1	28
5	1	6				9	1	2	29
15		15	1		1	1	3	4	30
18		18	1		1	2			31
17		17		1	1				33
266		266	28	2	30	259	37	67	34
122		122	16		16	88	15	22	35
10,947	76	11,023	2,205	145	2,350	4,091	688	1,732	
1,030	24	1,054	157	8	165	633	134	207	
11,977	100	12,077	2,362	153	2,515	4,724	822	1,939	
7		7	4		4	9	3	5	1
20		20				3		4	2
34	3	37		1	1	1	2	2	3
1		1							4
59	2	61	7		7	69	5	14	5
21	5	26		1	1	8	1	2	6
									7
									8
6		6				2	9	11	9
4		4	2		2	1	3	1	10
21		21				1	1	1	11
						4	1		12
15		15				8	5	14	13
24		24				40	2	2	14
									15
18		18	3		3	26	3	1	16
									17

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.								
18	Falls	10,064	9,853	452	8,308	766	327	9,401	211
19	Falling objects	1,887	1,827	21	1,458	304	44	1,806	60
20	Splinters	210	206	1	178	23	4	205	4
21	Machinery	248	242	2	217	23		240	6
22	Other industrial agents	671	669	26	512	81	50	643	2
23	Excessive cold	226	226	8	174	29	15	218	
24	Excessive heat	376	368	12	326	20	10	356	8
25	Land or snow slides	1	1				1	1	
26	Lightning	5	5		5			5	
27	Stones	175	167	4	110	43	10	163	8
28	Strangulation	18	18		16		2	18	
29	Jumping	440	438	9	384	33	12	429	2
30	Hot liquids	744	732	19	637	43	33	713	12
31	Fire, conflagrations, except.	242	240	2	213	18	7	238	2
32	Poisons	18	18	1	14	1	2	17	
33	Athletic exercises	7,597	7,505	270	6,543	508	184	7,235	92
34	Drilling and marching	539	517	40	422	49	6	477	22
35	Fighting (brawls)	993	977	2	813	132	30	975	16
36	Other external agents	15,503	15,236	573	12,664	1,228	771	14,663	265
	Total	59,434	58,460	2,492	48,742	4,883	2,343	55,968	974

The cases shown above are shown under the diagnosis.

TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.	
255	4,078	333	4,411	4,666	179	3,554	382	325	4,261	4,440
14	782	121	903	917	7	589	182	44	815	822
1	120	17	137	138	.....	50	5	4	59	59
1	132	9	141	142	1	77	13	.....	90	91
9	121	7	128	137	17	375	74	50	499	516
3	48	17	65	68	5	53	12	12	77	82
10	212	10	222	232	2	86	9	10	105	107
.....	.....	.....	.....	.....	.....	.....	.....	1	1	1
.....	5	.....	5	5	.....	.....	.....	.....	.....	.....
2	46	12	58	60	2	59	26	10	95	97
.....	11	.....	11	11	.....	4	.....	2	6	6
5	159	16	175	180	4	210	15	11	236	240
9	318	19	337	346	10	290	23	32	345	355
.....	102	7	109	109	2	99	10	7	116	118
.....	11	.....	11	11	1	3	1	2	6	7
158	3,568	279	3,847	4,005	108	2,664	215	183	3,062	3,170
29	283	20	303	332	9	97	3	6	106	115
2	343	54	397	399	.....	408	75	30	513	513
349	6,934	476	7,410	7,759	214	4,835	632	765	6,232	6,446
1,424	25,257	2,061	27,318	28,742	1,021	20,482	2,509	2,319	25,310	26,331

Office classification No.
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TABLE XV.—*Admissions, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,901
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	EXTERNAL AGENTS PRODUCING TRAUMATISM—continued.						
18	Falls	18	91	48	139	131	139
19	Falling objects		11		11	17	24
20	Splinters			1	1	4	2
21	Machinery			1	1	2	5
22	Other industrial agents					4	4
23	Excessive cold						
24	Excessive heat		9	1	10	2	4
25	Land or snow slides						
26	Lightning						
27	Stones			5	5	2	1
28	Strangulation						1
29	Jumping		1	2	3	7	3
30	Hot liquids		3	1	4	4	5
31	Fire, conflagrations excepted.		1	1	2	6	2
32	Poisons						
33	Athletic exercises	4	61	14	75	71	85
34	Drilling and marching	2	3	26	29	12	7
35	Fighting (brawls)		15	3	18	11	15
36	Other external agents	10	199	118	317	173	190
	Total	47	478	305	783	650	688

The cases shown above are shown under the diagnosis.

TABLE XV.—*Admissions. United States Army. 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
239	2	241	76	3	79	143	29	39	18
31		31	4	1	5	38	9	13	19
2		2				2	1	1	20
1		1					3	3	21
7		7	1		1	1		1	22
73	3	76							23
10		10	3		3	4	2	2	24
									25
									26
2		2				5	2	1	27
									28
4	1	5				2			29
15	1	16	2		2	8	2	2	30
3		3				1		1	31
									32
85	1	86	9		9	44	17	31	33
20		20				18	1	3	34
18		18	3		3	13	2	1	35
290	6	296	43	2	45	182	31	52	36
1,030	24	1,054	157	8	165	633	134	207	

TABLE XVI.—*Admissions, United States Army, 1919.*

RATIOS PER 1,000.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).							
1	Typhoid fever	0.47	0.47	0.34	0.48	0.19	0.47	0.08
3	Relapsing fever	.00	.00	.....	.00	.....	.00	.....
4	Malarial fevers (all)	2.30	1.88	1.40	1.95	1.39	1.91	35.01
4a	Malarial fever, estivo-autumnal	.36	.27	.14	.27	.32	.28	6.85
4b	Malarial fever, mixed	.01	.01	.02	.00	.01	.01	.64
4c	Malarial fever, quartan	.01	.01	.02	.01	.....	.01	.08
4d	Malarial fever, tertian	1.74	1.42	1.03	1.50	.90	1.44	26.97
4e	Malarial fever, unclassified	.18	.17	.20	.17	.16	.17	.48
5	Smallpox	.09	.09	.02	.07	.32	.09	.08
6	Measles (all)	2.36	2.36	.50	2.44	2.15	2.47	1.99
7	Scarlet fever	1.48	1.49	.56	1.69	.03	1.55	.08
8	Whooping cough	.01	.01	.04	.01	.....	.01	.....
9	Diphtheria and results	2.18	2.20	1.57	2.31	.59	2.24	.08
10	Influenza (all)	67.42	68.03	62.82	62.92	69.85	68.36	20.69
12	Asiatic cholera	.02	.01	.....	.01	.....	.01	.48
14	Dysentery (all)	.57	.49	.88	.45	.30	.47	7.01
14a	Dysentery, bacillary	.07	.06	.07	.06	.01	.06	.40
14b	Dysentery, balantidic	.00	.....	.....	.....	.....	.....	.16
14c	Dysentery, entamœbic	.21	.17	.45	.16	.11	.16	2.71
14e	Dysentery, unclassified	.30	.26	.36	.23	.18	.25	3.74
17	Leprosy	.00	.....	.....	.....	.....	.....	.24
18	Erysipelas	.40	.40	.45	.40	.31	.40	.....
19a	Carrier, bacillus, diphtheria	1.34	1.35	.56	1.48	.21	1.40	.16
19b	Carrier, bacillus, typhoid	.02	.02	.02	.02	.....	.02	.....
19c	Carrier, meningococcus	.55	.56	.09	.60	.19	.59	.....
19d	Carrier, epidemic diseases, others	.12	.11	.07	.12	.02	.11	1.27
19e	Chicken pox	.48	.45	.32	.34	1.39	.46	2.87
19f	German measles	.42	.40	.09	.43	.16	.42	2.15
19g	Meningitis, cerebrospinal (epidemic)	.76	.77	.45	.75	.90	.79	.16
19h	Mumps	35.82	35.86	6.70	35.71	40.61	37.59	32.54
19i	Paratyphoid A	.05	.05	.05	.05	.03	.05	.....
19j	Paratyphoid B	.04	.04	.07	.04	.01	.04	.....
19k	Poliomyelitis, anterior, acute	.01	.01	.....	.01	.01	.01	.....
19l	Trench fever	.26	.27	.11	.28	.02	.28	.....
19m	Trench mouth	.06	.06	.16	.05	.....	.05	.....
19n	Typhoid vaccination	1.94	1.93	.31	2.18	.35	2.02	3.27
19o	Vaccinia	.71	.71	.11	.81	.14	.75	.48
19p	Epidemic diseases, others	.71	.62	1.13	.62	.21	.59	8.20
20a	Septicemia, general	.04	.04	.02	.04	.04	.04	.....
22	Anthrax	.01	.01	.02	.01	.01	.01	.....
24	Tetanus	.00	.00	.09	.00	.....	.00	.....
25a	Trench foot	.21	.22	.02	.20	.25	.23	.....
25b	Mycosis (others)	.01	.01	.....	.01	.02	.01	.24
26	Pellagra	.01	.01	.....	.01	.01	.01	.....
27	Beriberi	.01	.....	.....	.....	.....	.....	.48
47	Acute articular rheumatism	1.91	1.92	.99	1.86	2.31	1.98	1.04
	II. TUBERCULOSIS.							
28a	Tuberculosis of lungs	5.45	5.36	6.46	4.88	7.78	5.30	12.57
28b	Suspected tuberculosis	1.41	1.42	1.10	1.23	2.44	1.44	.40
29	Acute miliary tuberculosis	.10	.10	.04	.06	.53	.10	.16
30–35	Tuberculosis, others	.52	.53	.50	.44	1.24	.53	.32
	Tuberculosis (all)	7.48	7.41	8.10	6.61	11.99	7.37	13.45

TABLE XVI.—*Admissions, United States Army, 1919.*

RATIOS PER 1,000.

United States Army in United States (including Alaska).						United States Army in Europe (excluding Russia).				
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.11	0.24	0.07	0.22	0.22	0.64	0.69	0.27	0.69	0.68	1
										3
2.14	3.58	1.22	3.38	3.28	.32	.31	.43	.35	.35	4
.19	.14	.19	.15	.15		.01		.02	.02	4a
.04	.01	.04	.01	.01						4b
.04	.03		.03	.03		.00		.00	.00	4c
1.69	3.18	.89	2.98	2.88	.20	.21	.31	.23	.23	4d
.19	.22	.11	.21	.21	.12	.08	.12	.10	.10	4e
	.14	1.11	.22	.21		.02		.01	.01	5
.41	3.74	6.03	3.95	3.66	.64	1.77	.60	1.75	1.70	6
.71	3.98	.07	3.63	3.40	.44	.61	.02	.60	.59	7
.08	.03		.03	.03		.01		.01	.01	8
1.50	2.78	1.04	2.62	2.53	1.89	2.33	.46	2.31	2.29	9
44.47	49.71	37.17	48.61	48.27	88.36	75.88	93.89	85.92	86.02	10
										12
.68	.44	.33	.43	.45	1.01	.24	.20	.30	.33	14
.04	.00	.04	.01	.01	.12	.05		.05	.05	14a
										14b
.34	.18	.07	.17	.19	.48	.05	.05	.06	.08	14c
.30	.26	.22	.25	.26	.40	.15	.15	.19	.20	14e
										17
.53	.81	.70	.80	.78	.36	.18	.17	.20	.21	18
.86	2.56	.63	2.39	2.27	.32	1.08	.05	1.05	1.01	19a
	.01		.01	.01	.04	.03		.03	.03	19b
.04	.97	.30	.91	.84	.16	.47	.17	.48	.46	19c
	.14	.04	.13	.12	.16	.08	.02	.08	.08	19d
.41	.58	2.77	.77	.74	.28	.24	.90	.33	.33	19e
.15	.89	.52	.85	.80		.21	.02	.22	.21	19f
.30	.54	.81	.57	.55	.69	.94	1.04	1.00	1.00	19g
7.43	49.66	90.92	53.30	49.63	6.49	31.05	22.52	32.50	31.38	19h
	.01		.01	.01	.08	.06	.05	.07	.07	19i
	.01		.01	.01	.16	.03	.02	.03	.04	19j
	.01		.01	.01		.02	.02	.02	.02	19k
	.03		.03	.02	.24	.46	.03	.46	.45	19l
.15	.04		.03	.04	.16	.07		.07	.08	19m
.15	5.63	.85	5.21	4.81	.44	.47	.10	.47	.47	19n
.15	2.11	.37	1.96	1.82	.04	.07	.05	.07	.07	19o
.53	.45	.15	.43	.43	.24	.23	.12	.23	.23	19p
.04	.06	.07	.06	.06		.03	.03	.03	.03	20a
.04	.03	.04	.03	.03		.01		.01	.01	22
	.01		.01	.01		.00		.00	.00	24
.04	.13	.07	.12	.12	.16	.27	.36	.31	.30	25a
	.01	.07	.02	.02	.04	.00		.00	.00	25b
	.01	.04	.01	.01		.01		.01	.01	26
										27
1.09	3.00	3.55	3.05	2.90	.97	1.42	2.03	1.61	1.58	47
10.73	9.01	12.50	9.31	9.43	2.58	3.04	6.59	3.65	3.60	28a
1.43	1.49	2.77	1.60	1.59	.93	1.21	2.58	1.50	1.48	28b
	.04	.30	.06	.06	.08	.07	.70	.14	.14	29
.60	.60	1.37	.67	.66	.48	.39	1.35	.51	.51	30–35
12.75	11.13	16.94	11.65	11.73	4.07	4.72	11.22	5.80	5.73	

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
3	Relapsing fever		0.26		0.18		
4	Malarial fevers (all)	3.20	14.68	45.46	23.43		82.18
4a	Malarial fever, estivo-autumnal	.74	3.09	16.23	6.82		33.00
4b	Malarial fever, mixed		.26		.18		.20
4c	Malarial fever, quartan						.40
4d	Malarial fever, tertian	1.72	11.33	26.62	15.68		42.99
4e	Malarial fever, unclassified	.74		2.60	.74		5.60
5	Smallpox	.25	.26		.18		
6	Measles (all)	.25	2.83		2.03	6.05	3.20
7	Scarlet fever	.25	.52		.37		
8	Whooping cough						
9	Diphtheria and results		.26		.18		.20
10	Influenza (all)	27.30	15.20		10.88	32.49	30.80
12	Asiatic cholera		2.58		1.84		
14	Dysentery (all)	1.48	14.68	4.55	11.81		3.60
14a	Dysentery, bacillary						
14b	Dysentery, balantidic						
14c	Dysentery, entamoebic	.98	11.33	3.25	9.04		1.20
14e	Dysentery, unclassified	.49	3.35	1.30	2.77		.40
17	Leprosy						
18	Erysipelas	.49	1.03		.74		1.00
19a	Carrier, bacillus, diphtheria		.26		.18		
19b	Carrier, bacillus, typhoid						
19c	Carrier, meningococcus						
19d	Carrier, epidemic diseases, others		4.89		3.50		
19e	Chicken pox		.52	.65	.55		
19f	German measles	.25	1.55		1.11		
19g	Meningitis, cerebrospinal (epidemic)						
19h	Mumps	3.20	16.74	3.25	12.91	4.78	1.60
19i	Paratyphoid A	.25					
19j	Paratyphoid B						
19k	Poliomyelitis, anterior, acute						
19l	Trench fever						
19m	Trench mouth	.25					
19n	Typhoid vaccination	.49	1.29	2.60	1.66	2.23	.60
19o	Vaccinia	.25	1.80		1.29		.80
19p	Epidemic diseases, others	10.57	67.24	5.84	49.80		
20a	Septicemia, general						
22	Anthrax						
24	Tetanus						
25a	Trench foot						
25b	Mycosis (others)						
26	Pellagra						
27	Beriberi						
47	Acute articular rheumatism	.49	.77	.65	.74		.60
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs	2.21	8.76	1.95	6.83	6.69	1.20
28b	Suspected tuberculosis		1.55		1.11	4.46	
29	Acute miliary tuberculosis						
30–35	Tuberculosis, others		.77		.55	.32	
	Tuberculosis (all)	2.21	11.08	1.95	8.49	11.47	1.20

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
0.40	0.50				0.12			1
								3
.79	.79	0.30	0.32	0.30	41.12		45.41	4
.30	.30	.08		.07	7.87		9.56	4a
					.95			4b
					.12			4c
		.13	.16	.13	31.58		35.37	4d
.50	.50	.09	.16	.10	.60		.48	4e
.79	.79				.12			5
3.27	3.27	1.26	.48	1.18	2.26	2.88		6
.20	.20	.11		.10	.12			7
								8
.69	.69	.39		.35		.48		9
131.92	132.02	8.80	3.49	8.24	18.11	44.11	7.65	10
.10	.10				.72			12
6.94	6.94	.04		.03	9.18		5.26	14
2.68	2.68				.24		1.43	14a
					.24			14b
.89	.89				3.94		.48	14c
3.37	3.37	.04		.03	4.77		3.35	14e
						1.44		17
.50	.50	.08		.07				18
.20	.20	.06		.05	.24			19a
								19b
.99	.99							19c
.10	.10				1.91			19d
.50	.50	.02	.16	.03	3.22	2.40	1.91	19e
.10	.20	.02		.02	3.10		.48	19f
1.09	109	.17	.16	.17		.48	.48	19g
66.65	66.95	5.76	2.22	5.39	40.75	.48	31.55	19h
.60	.60							19i
1.09	1.09							19j
.10	.10							19k
								19l
								19m
.99	1.09	.17		.15	4.29		2.39	19n
4.17	4.17	.08		.07	.72			19o
2.09	2.09	.06		.05	11.56	.48	2.39	19p
								20a
.10	.10							22
								24
.30	.30							25a
					.36			25b
								26
					.24		1.91	27
2.58	2.68	.09		.08	1.55			47
4.76	4.76	.02		.02	14.42	11.51	6.21	28a
.79	.89	.08	.32	.10	.48		.48	28b
.10	.10		.16	.02	.24			29
.30	.30				.24	.48	.48	30–35
5.95	6.05	.09	.48	.13	15.37	11.99	7.17	

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men including native troops.	Total officers and enlisted men American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	III. VENEREAL DISEASES (ALL).							
37	Syphilis (all)	13.35	13.39	7.74	10.69	31.86	13.72	10.42
37a	Syphilis, hereditary	.03	.03	.....	.02	.05	.03	.08
37b	Syphilis, primary	4.78	4.82	2.65	3.84	10.86	4.95	1.83
37c	Syphilis, secondary	5.70	5.73	3.60	4.73	12.59	5.86	3.34
37d	Syphilis, tertiary	1.90	1.87	.92	1.41	5.86	1.93	4.37
37e	Syphilis, unclassified	.94	.94	.58	.68	2.49	.96	.80
38a	Chancroidal infection	14.13	14.27	4.91	11.13	32.65	14.82	3.74
38b	Gonococcus infection	33.82	33.99	17.44	29.14	61.08	34.97	20.53
	Venereal (all)	61.31	61.65	30.10	50.96	125.59	63.52	34.69
	IV. GENERAL DISEASES (OTHER).							
36	Rickets	.11	.11	.02	.12	.03	.11	.16
39–45	Cancer and other malignant tumors	.13	.13	.34	.12	.07	.12	.08
46	Tumors, benign	2.27	2.27	2.29	2.34	1.19	2.27	2.23
48a	Arthritis	7.73	7.80	4.84	7.25	11.32	7.98	2.07
48b	Gout	.01	.01	.13	.01	.01	.01	.....
49	Scurvy	.00	.00	.....	.00	.....	.00	.....
50	Diabetes, mellitus	.17	.17	.41	.16	.14	.15	.....
51a	Exophthalmic goiter (hyperthyroidism).	.83	.84	.58	.90	.22	.85	.16
51b	Cretinism and myxedema	.01	.01	.....	.01	.....	.01	.08
52a	Addison's disease	.00	.00	.....	.00	.....	.00	.....
52b	Acromegaly	.01	.01	.....	.01	.....	.01	.....
53a	Leukemia	.01	.01	.02	.01	.....	.01	.....
53b	Hodgkin's disease	.02	.02	.....	.02	.03	.02	.....
88	Goiter, simple	.27	.27	.16	.29	.06	.28	.....
116	Spleen, diseases of	.01	.01	.02	.01	.....	.01	.....
53c	Other diseases of the ductless glands	.04	.04	.....	.04	.02	.04	.....
54	Anemia, chlorosis	.11	.10	.23	.10	.01	.09	.64
55a	Hemophilia	.01	.01	.....	.01	.....	.01	.....
55b	Obesity	.00	.01	.....	.01	.....	.01	.....
55c	Purpura	.03	.03	.02	.03	.01	.03	.08
55d	Muscular rheumatism	1.81	1.80	1.06	1.68	2.27	1.85	2.15
55e	General diseases, others	.77	.77	.94	.74	.73	.76	.40
56a	Alcoholism (acute or chronic)	1.73	1.75	2.36	1.77	.68	1.71	.48
56b	Drug addiction	.18	.18	.14	.17	.22	.18	.08
57–59	Poisoning, chronic	.02	.02	.04	.02	.05	.02	.....
	V. NERVOUS SYSTEM, DISEASES OF (ALL).							
60	Encephalitis	.04	.04	.05	.04	.03	.04	.....
61	Meningitis, simple	.09	.10	.05	.09	.17	.10	.....
62	Locomotor ataxia	.03	.03	.05	.03	.06	.03	.....
63a	Multiple sclerosis	.01	.01	.04	.01	.....	.01	.....
63b	Spinal cord, diseases of (others)	.07	.07	.07	.07	.03	.07	.16
64	Apoplexy	.06	.06	.13	.05	.10	.06	.08
66a	Facial paralysis	.15	.15	.18	.15	.14	.15	.....
66b	Paraplegia	.01	.01	.....	.01	.02	.01	.....
66c	Paralysis without specified cause (others).	.20	.20	.14	.21	.13	.20	.16
69	Epilepsy	.87	.88	.23	.88	.92	.92	.08
74a	Jacksonian epilepsy	.01	.01	.....	.01	.03	.01	.....
74b	Neurasthenia	2.48	2.49	5.80	2.41	.50	2.31	.72
74c	Enuresis	.37	.38	.....	.39	.43	.40	.....
74d	Neurosis	.07	.07	.14	.07	.01	.06	.08
74e	Neuro-circulatory asthenia (disordered action of the heart).	1.34	1.36	.74	1.35	1.17	1.39	.....
74f	Shell shock (cause not given)	.11	.11	.25	.10	.....	.10	.08
72	Chorea	.02	.02	.....	.02	.....	.02	.08

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).				
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
6.19	16.63	70.39	21.36	20.15	10.28	7.96	17.97	10.62	10.60	37
.....	.05	.....	.04	.04	.....	.01	.09	.02	.02	37a
1.69	5.15	21.49	6.59	6.20	4.07	3.54	7.41	4.65	4.62	37b
3.04	8.18	34.51	10.50	9.90	4.47	2.79	4.01	3.51	3.55	37c
1.20	2.41	12.02	3.26	3.10	.77	.96	3.64	1.36	1.33	37d
.26	.84	2.37	.97	.92	.97	.67	2.83	1.08	1.07	37e
1.28	8.78	57.44	13.07	12.13	9.38	11.85	23.93	15.79	15.51	38a
7.91	42.37	162.23	52.93	49.33	30.10	24.60	18.81	28.51	28.58	38b
15.38	67.78	290.05	87.36	81.60	49.73	44.42	60.70	54.91	54.69	
.....	.20	.04	.19	.17	.04	.08	.03	.08	.08	36
.34	.20	.11	.19	.20	.40	.09	.05	.09	.10	39–45
3.60	2.18	1.59	2.12	2.24	1.09	.98	1.14	1.05	1.05	46
4.91	8.74	12.02	9.03	8.70	5.32	7.14	12.41	8.26	8.13	48a
.11	.01	.04	.01	.02	.12	.00	.....	.01	.01	48b
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	49
.64	.23	.15	.22	.26	.24	.12	.15	.13	.13	50
.49	1.48	.30	1.37	1.30	.77	.68	.22	.67	.67	51a
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	51b
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	52a
.....	.00	.....	.00	.00	.....	.01	.....	.01	.01	52b
.04	.02	.....	.02	.02	.....	.01	.....	.01	.01	53a
.....	.01	.04	.01	.01	.....	.02	.03	.02	.02	53b
.19	.41	.15	.39	.37	.16	.23	.03	.22	.22	88
.....	.01	.....	.01	.01	.04	.01	.....	.01	.01	116
.....	.08	.07	.07	.07	.....	.02	.....	.02	.02	53c
.26	.17	.04	.16	.17	.24	.07	.....	.07	.08	54
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	55a
.....	.01	.....	.01	.01	.....	.01	.....	.01	.01	55b
.04	.04	.....	.03	.03	.....	.03	.02	.03	.03	55c
1.31	2.50	3.99	2.63	2.53	.85	1.28	1.76	1.51	1.48	55d
.86	1.00	1.00	1.00	.99	1.17	.65	.67	.70	.72	55e
1.80	2.28	.78	2.15	2.12	3.06	1.33	.49	1.33	1.41	56a
.11	.44	.67	.46	.43	.16	.05	.03	.05	.05	56b
.04	.03	.11	.03	.03	.04	.01	.03	.02	.02	57–59
.04	.06	.07	.07	.06	.08	.04	.02	.04	.04	60
.04	.07	.22	.08	.08	.08	.11	.17	.12	.12	61
.08	.05	.15	.06	.06	.04	.01	.03	.01	.02	62
.04	.02	.....	.02	.02	.04	.01	.....	.01	.01	63a
.11	.12	.04	.11	.11	.....	.04	.03	.05	.05	63b
.11	.07	.26	.08	.09	.16	.04	.03	.04	.05	64
.26	.21	.19	.21	.21	.12	.13	.14	.14	.13	66a
.....	.01	.....	.01	.01	.....	.00	.03	.01	.01	66b
.19	.40	.15	.38	.37	.12	.12	.14	.13	.13	66c
.34	1.38	1.18	1.36	1.28	.12	.67	.92	.76	.73	69
.....	.01	.11	.02	.01	.....	.01	.....	.01	.01	74a
6.98	3.86	1.00	3.61	3.88	5.00	1.75	.34	1.75	1.89	74b
.....	.58	.70	.59	.54	.....	.29	.29	.30	.29	74c
.15	.10	.....	.09	.09	.16	.05	.02	.05	.06	74d
.56	.98	.48	.94	.91	1.05	1.77	1.64	1.86	1.83	74e
.23	.16	.....	.14	.15	.32	.09	.....	.09	.09	74f
.....	.05	.....	.04	.04	.....	.01	.....	.01	.01	72

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)	2.46	17.52	14.29	16.60	9.24	7.80
37a	Syphilis, hereditary						
37b	Syphilis, primary	.25	2.32		1.66	1.27	1.00
37c	Syphilis, secondary	1.97	12.37	5.84	10.51	2.23	3.40
37d	Syphilis, tertiary		2.32	6.49	3.50	4.46	3.00
37e	Spyhilis, unclassified	.25	.52	1.95	.92	1.27	.40
38a	Chancroidal infection	1.48	65.70	58.44	63.64	2.87	33.79
38b	Gonococcus infection	2.71	73.16	135.72	90.93	45.55	41.79
	Venereal (all)	6.64	156.36	208.44	171.16	57.65	83.38
	IV. GENERAL DISEASES (OTHER).						
36	Rickets						
39–45	Cancer and other malignant tumors.		.77	.65	.74	.32	
46	Tumors, benign	.98	1.55	.65	1.29	1.91	2.00
48a	Arthritis	1.48	4.38	3.90	4.24	5.10	1.20
48b	Gout	.25					
49	Scurvy						
50	Diabetes, mellitus		.26		.18		
51a	Exophthalmic goiter (hyperthyroidism).		.26		.18	.32	.20
51b	Cretinism and myxedema						
52a	Addison's disease						
52b	Acromegaly						
53a	Leukemia						
53b	Hodgkin's disease						.20
88	Goiter, simple		.26		.18	1.27	.40
116	Spleen, diseases of						
53c	Other diseases of the ductless glands.						
54	Anemia, chlorosis		.26		.18		
55a	Hemophilia						
55b	Obesity						
55c	Purpura						
55d	Muscular rehumatism	.74	3.61		2.58	2.87	1.00
55e	General diseases, others		.52	1.30	.74	5.73	.20
56a	Alcoholism (acute or chronic)	1.72	18.03	9.09	15.49	7.64	7.20
56b	Drug addiction	.25		.65	.18		
57–59	Poisoning, chronic					.32	
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
62	Locomotor ataxia		.52		.37		
63a	Multiple sclerosis						
63b	Spinal cord, diseases of (others)	.25	1.03		.74		.20
64	Apoplexy						
66a	Facial paralysis						
66b	Paraplegia		.26		.18		
66c	Paralysis without specified cause (others).		.52		.37	.32	
69	Epilepsy	.25	1.55		1.11	1.59	1.40
74a	Jacksonian epilepsy						
74b	Neurasthenia	2.95	5.92		4.24	.64	8.60
74c	Enuresis		1.29	2.60	1.66	3.19	.20
74d	Neurosis					.32	.60
74e	Neuro-circulatory asthenia (disordered action of the heart).						
74f	Shell shock (cause not given)						
72	Chorea		.26		.18		

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	International classification No.
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
31.84	32.04	0.30			4.29	4.32	41.11	37
.10	.10			0.27	.12			37a
4.66	4.76	.11		.10	.48	.48	8.60	37b
25.59	25.69	.13		.12	1.55	.48	13.39	37c
1.29	1.29	.04		.03	1.31	3.36	17.69	37d
.20	.20	.02		.02	.83		1.43	37e
66.65	66.65	.77	1.11	.81	1.67	3.36	12.43	38a
.60	.60	1.35	1.91	1.41	13.23	33.56	36.81	38b
99.10	99.28	2.42	3.02	2.48	19.19	41.26	90.34	
.20	.20	.02		.02	.24			36
	.10				.12			39–45
86.00	86.59				2.26	.48	3.82	46
13.00	13.00	.21		.18	1.07	1.44	6.69	48a
								48b
								49
.60	.60							50
.79	.79	.04		.03	.24			51a
							.48	51b
								52a
								52b
								53a
								53b
.99	.99	.02		.02				88
								116
.20	.20							53c
.10	.10				.72		.96	54
								55a
								55b
		.02		.02		.48		55c
6.05	6.05	.11	.16	.12	2.26	.96	2.87	55d
.50	.50				.24	1.44		55e
6.74	6.74	.06		.05	.12		2.39	56a
						.48		56b
								57–59
	.10							60
								61
		.02		.02				62
.10	.10							63a
.20	.20				.12		.48	63b
.20	.20				.12			64
.30	.30							66a
								66b
.10	.10	.04		.03	.12		.48	66c
1.39	1.39				.12			69
								74a
2.58	2.58	.09		.08		.48	3.82	74b
.99	.99							74c
.10	.10						.48	74d
								74e
.20	.20				.12			74f
							.48	72

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men including native troops.	Total officers and enlisted men American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—Continued.							
73a	Hysteria and results (psychoses excepted).	1.19	1.20	0.88	1.22	.71	1.22	0.32
73b	Neuralgia	1.02	1.02	1.15	.95	1.27	1.02	1.04
73c	Neuritis	1.43	1.43	2.95	1.31	.97	1.34	1.67
73d	Speech, defective	.02	.02	.04	.02	.01	.02	.....
74g	Nervous system, other diseases of	1.19	1.19	4.84	.98	.66	.97	1.59
	VI. MENTAL ALIENATION.							
67	General paralysis of the insane	.06	.06	.16	.05	.05	.06	.....
68a	Constitutional psychopathic states	.90	.91	.52	.98	.21	.93	.....
68b	Mental deficiency	1.23	1.24	.05	1.28	1.36	1.31	.48
68c	Malingering	.07	.07	.....	.07	.07	.07	.16
68d	Dementia præcox	.93	.93	.20	.98	.68	.97	.80
68e	Psychasthenia	.18	.18	.67	.16	.01	.15	.....
68f	Psychoneurosis	.57	.58	1.10	.56	.18	.55	.....
68g	Psychosis, alcoholic	.15	.15	.22	.16	.03	.15	.....
68h	Psychosis, manic depressive	.57	.57	.67	.58	.26	.57	.....
68i	Psychosis (others)	.86	.87	.63	.83	1.09	.88	.40
	VII. EYES AND THEIR ANNEXA, DISEASES OF.							
75a	Refractive errors (all)	1.92	1.94	1.12	2.07	.59	1.99	.32
	(1) Astigmatism	.76	.77	.68	.81	.20	.77	.08
	(2) Hyperopia	.49	.49	.16	.53	.11	.51	.....
	(3) Myopia	.50	.50	.20	.55	.21	.52	.16
	(4) Defective vision (cause not stated).	.18	.18	.07	.19	.06	.18	.08
75b	Strabismus	.16	.16	.05	.17	.04	.16	.....
75c	Leucoma	.05	.05	.02	.05	.07	.06	.....
75d	Cataract	.11	.11	.09	.12	.03	.11	.08
75e	Trachoma	.29	.29	.11	.32	.05	.30	.24
75f	Conjunctivitis (others)	2.98	2.94	2.09	2.84	3.30	2.99	6.21
75g	Pterygium	.26	.25	.41	.22	.27	.24	1.59
75h	Amblyopia	.23	.23	.09	.24	.19	.24	.....
75i	Amaurosis	.02	.02	.....	.01	.04	.02	.08
75j	Choroiditis	.16	.16	.13	.16	.17	.17	.....
75k	Iritis	.52	.52	.70	.46	.78	.51	.08
75l	Keratitis	.75	.75	.56	.64	1.40	.76	.40
75m	Retinitis	.12	.12	.18	.12	.07	.12	.....
75n	Nystagmus	.02	.02	.....	.02	.01	.02	.....
75o	Glaucoma	.02	.02	.05	.02	.01	.02	.....
75p	Eyelids, diseases of	.48	.48	.25	.49	.36	.49	.40
75r	Eyes and annexa, other diseases of	1.03	1.04	.61	.99	1.31	1.06	.72
	VIII. EAR, DISEASES OF.							
76a	Otitis media	8.41	8.49	6.46	8.75	4.11	8.61	1.99
76b	Mastoiditis	.34	.35	.16	.35	.32	.36	.08
76c	Otitis, external	.36	.36	.41	.36	.10	.35	.72
76d	Defective hearing (cause not stated)	.15	.16	.36	.15	.04	.14	.....
76e	Ear, other diseases of	.33	.33	.36	.32	.19	.33	.16
	IX. NASAL FOSSÆ, DISEASES OF.							
86a	Adenoids	.17	.17	.11	.19	.04	.18	.....
86b	Deviation of nasal septum and spurs.	1.86	1.88	6.26	1.74	.15	1.62	.24
86c	Nose, external deformity of	.....	.....	.....	.....	.....	.....	.....

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
1.01	1.65	0.92	1.59	1.54	0.89	1.10	0.70	1.15	1.14	73a
1.28	1.56	2.37	1.63	1.60	1.13	.64	.85	.72	.74	73b
3.98	1.64	1.48	1.63	1.81	2.18	1.21	.84	1.27	1.31	73c
.04	.06	.04	.06	.06	.04	.....	.....	.....	.00	73d
8.85	1.78	1.22	1.73	2.30	1.29	.60	.46	.63	.65	74g
.19	1.10	.04	.09	.10	.16	.04	.07	.05	.05	67
.34	1.42	.41	1.33	1.25	.81	.85	.12	.82	.82	68a
.08	1.94	2.00	1.95	1.80	.04	1.01	1.23	1.07	1.03	68b
.....	.08	.19	.09	.08	.....	.05	.....	.05	.05	68c
.26	1.92	1.48	1.88	1.75	.12	.54	.36	.55	.53	68d
.90	.18	.....	.17	.22	.48	.15	.02	.15	.17	68e
1.39	.83	.19	.77	.82	.93	.48	.20	.49	.51	68f
.19	.13	.07	.13	.13	.28	.17	.02	.16	.17	68g
.71	.94	.30	.88	.87	.73	.46	.27	.47	.48	68h
.30	.71	.70	.71	.68	1.09	1.00	1.42	1.09	1.09	68i
.90	2.14	.67	2.01	1.92	1.41	2.18	.63	2.13	2.09	75a
.49	.62	.19	.58	.57	.93	.96	.24	.93	.93	(1)
.08	.51	.04	.47	.44	.28	.59	.15	.58	.57	(2)
.23	.65	.22	.61	.58	.16	.51	.24	.50	.48	(3)
.11	.36	.22	.35	.33	.04	.11	.....	.12	.11	(4)
.04	.29	.07	.27	.25	.08	.12	.03	.12	.12	75b
.....	.09	.07	.09	.08	.04	.02	.09	.03	.03	75c
.08	.20	.07	.19	.18	.12	.09	.02	.09	.09	75d
.15	.59	.07	.54	.51	.08	.19	.05	.19	.19	75e
.69	3.72	4.51	3.79	3.62	2.70	2.55	3.05	2.77	2.77	75f
.60	.32	.30	.32	.34	.24	.17	.29	.20	.20	75g
.08	.30	.30	.30	.28	.12	.23	.15	.23	.23	75h
.....	.01	.....	.01	.01	.....	.01	.07	.02	.02	75i
.19	.19	.26	.20	.19	.08	.16	.15	.17	.17	75j
.75	.71	1.41	.77	.77	.77	.37	.60	.43	.44	75k
.56	.81	1.48	.87	.85	.64	.63	1.55	.81	.80	75l
.19	.18	.15	.18	.18	.20	.10	.05	.10	.10	75m
.....	.03	.04	.03	.03	.....	.01	.....	.01	.01	75n
.04	.03	.04	.03	.03	.08	.02	.....	.02	.02	75o
.30	.77	.52	.75	.71	.20	.35	.34	.37	.36	75p
.83	1.23	2.00	1.29	1.26	.44	.96	1.14	1.05	1.03	75r
6.86	11.24	5.55	10.74	10.43	6.85	8.13	3.82	8.22	8.16	76a
.15	.50	.22	.48	.45	.20	.30	.41	.33	.33	76b
.53	.52	.11	.48	.49	.16	.20	.10	.22	.21	76c
.71	.35	.11	.33	.36	.04	.05	.02	.05	.05	76d
.45	.40	.30	.39	.39	.28	.30	.17	.33	.32	76e
.19	.25	.11	.23	.23	.....	.15	.02	.14	.14	86a
10.80	3.38	.11	3.09	3.70	1.89	.96	.12	.94	.98	86b
										86c

TABLE XVI. —*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii	Panama.
			White.	Colored.	Total.	White.	White.
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—continued.						
73a	Hysteria and results (psychoses excepted).		1.55		1.11		0.40
73b	Neuralgia	0.49	3.35	3.25	3.32	1.27	1.40
73c	Neuritis	.98	1.29	1.30	1.29	1.27	3.00
73d	Speech, defective						
74g	Nervous system, other diseases of	.25	2.06	1.30	1.84	.64	3.00
	VI. MENTAL ALIENATION.						
67	General paralysis of the insane						
68a	Constitutional psychopathic states			1.30	.37	.96	.80
68b	Mental deficiency		1.55	.65	1.29	1.59	.40
68c	Malingering		.52	1.30	.74		.20
68d	Dementia præcox	.25	.26	1.95	.74		1.60
68e	Psychasthenia	.25	.52		.37	.32	
68f	Psychoneurosis	.25	1.03		.74	.64	
68g	Psychosis, alcoholic						.60
68h	Psychosis, manic depressive						.40
68i	Psychosis (others)		.26		.18	.64	.80
	VII. EYES AND THEIR ANNEXA, DISEASES OF.						
75a	Refractive errors (all)	.74	1.29		.92	1.27	
	(1) Astigmatism	.49				.64	
	(2) Hyperopia		.77		.55	.64	
	(3) Myopia	.25	.52		.37		
	(4) Defective vision (cause not stated).						
75b	Strabismus		1.03		.74		
75c	Leucoma					.32	
75d	Cataract						
75e	Trachoma		.77		.55		.20
75f	Conjunctivitis (others)	.98	3.09	3.25	3.14	3.19	2.20
75g	Pterygium	.25	.26		.18	.32	1.00
75h	Amblyopia					.64	
75i	Amaurosis						
75j	Choroiditis					.32	.20
75k	Iritis		.52		.37	.32	
75l	Keratitis		.52		.37	.32	.20
75m	Retinitis		.52		.37		.20
75n	Nystagmus						
75o	Glaucoma					.32	
75p	Eyelids, diseases of	.25	1.03		.74	2.23	1.20
75r	Eyes and annexa, other diseases of	.25	.52	.65	.55	1.91	.60
	VIII. EAR, DISEASES OF.						
76a	Otitis media	1.48	4.12	5.20	4.43	10.19	5.60
76b	Mastoiditis		.26		.18		.20
76c	Otitis externa	1.23	4.89		3.50	.64	7.00
76d	Defective hearing (cause not stated).					.32	.20
76e	Ear, other diseases of	.25	.26		.18	1.59	
	IX. NASAL FOSSÆ, DISEASES OF.						
86a	Adenoids	.25				3.50	
86b	Deviation of nasal septum and spurs.	3.20	1.29	2.60	1.66	4.78	5.00
86c	Nose, external deformity of						

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
1.98	1.98	0.04		0.03			1.91	73a
2.28	2.38	.09		.08	1.07	0.48	1.43	73b
3.37	3.37	.04		.03	1.31	.96	3.82	73c
.10	.10							73d
.89	.89	.02		.02	2.15	.96		74g
								67
.99	1.09							68a
2.78	2.78	.02		.02	.24	1.92		68b
.40	.40	.04		.03	.12		.48	68c
1.49	1.49	.06		.05	.72	.96	.96	68d
.30	.30							68e
.30	.30							68f
.69	.69	.02		.02				68g
.30	.30							68h
.40	.50	.02		.02	.24		1.43	68i
7.64	7.74	.02		.02	.24		.96	75a
3.57	3.57	.02		.02	.12			(1)
1.19	1.19							(2)
2.68	2.68				.12		.48	(3)
.20	.30						.48	(4)
.20								75b
		.11		.10				75c
					.12			75d
.69	.69				.12	.48	.48	75e
7.74	7.74	.11	0.32	.13	6.91	5.75	3.82	75f
.40	.40	.02		.02	1.79	.96	1.43	75g
.20	.20							75h
.20	.20					.48		75i
								75j
.10	.20	.04		.03			.48	75k
.20	.20	.02		.02	.36	.96		75l
.20	.20							75m
.10	.10							75n
								75o
1.19	1.19	.02		.02	.48	.48		75p
.79	.79	.04		.03	.36	.96	1.91	75r
16.07	16.17	.51	.32	.49	.72	1.92	7.17	76a
.20	.20						.48	76b
.79	.79	.02		.02	.60	.96	.96	76c
.10	.10							76d
.89	.89				.12		.48	76e
.30	.30							86a
1.09	1.19				.12	.96		86b
								86c

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men including native troops.	Total officers and enlisted men American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	IX. NASAL FOSSÆ, DISEASES OF—continued.							
86d	Turbinate hypertrophy	0.31	0.31	0.43	0.30	0.13	0.30	0.32
86e	Sinusitis (all)	3.34	3.38	7.81	3.09	2.10	3.11	.48
86f	Polypus nasal	.14	.14	.40	.12	.05	.12	.....
86g	Perforated nasal septum	.01	.01	.....	.01	.01	.01	.....
86h	Rhinitis (cause not stated)	9.38	9.46	9.38	9.45	8.34	9.46	3.02
86i	Nasal fossæ, other diseases of	1.21	1.22	1.42	1.18	1.34	1.21	.40
	X. THROAT, DISEASES OF.							
87a	Laryngitis, acute catarrhal	4.05	4.09	3.78	4.07	2.69	4.11	1.27
87b	Larynx, other diseases of	.02	.02	.02	.02	.....	.02	.....
100a	Tonsillitis, acute	40.18	40.57	31.66	41.20	33.74	41.09	9.47
100b	Tonsillitis, chronic	4.95	5.01	15.25	4.64	1.23	4.40	.64
100c	Tonsils, focal infection from	.15	.15	.52	.13	.14	.13	.08
100d	Pharyngitis, acute catarrhal	13.48	13.56	12.04	13.52	10.70	13.65	7.64
100e	Pharynx, other diseases of	4.59	4.64	8.41	4.67	1.02	4.42	.64
	XI. CIRCULATORY SYSTEM, DISEASES OF.							
77	Pericarditis	.07	.07	.02	.06	.14	.07	.....
78	Endocarditis, acute	.04	.04	.05	.04	.06	.04	.....
79a	Valvular diseases of the heart	2.96	2.98	1.96	2.91	3.38	3.04	1.27
	(1) Aortic insufficiency	.30	.30	.23	.28	.45	.30	.....
	(2) Aortic stenosis	.05	.05	.02	.04	.06	.05	.....
	(3) Mitral insufficiency	2.00	2.01	1.42	1.96	2.31	2.04	.96
	(4) Mitral stenosis	.41	.42	.20	.41	.45	.43	.16
	(5) Combined lesions, mitral aortic.	.12	.12	.04	.13	.07	.12	.08
	(6) Pulmonic lesions	.00	.00	.....	.00	.....	.00	.....
	(7) Tricuspid lesions	.....	.....	.....	.....	.....	.....	.....
	(8) Valvular lesions, unclassified.	.08	.08	.05	.09	.03	.08	.08
79b	Cardiac hypertrophy	.15	.15	.18	.13	.21	.15	.....
79c	Cardiac dilatation	.07	.07	.20	.06	.07	.06	.08
79d	Myocarditis and myocardial insufficiency.	.54	.54	1.26	.46	.68	.50	.08
79e	Heart, other organic diseases of	.26	.26	.14	.24	.36	.27	.24
80	Angina pectoris	.06	.06	.16	.05	.06	.05	.....
81a	Aneurisms	.03	.03	.04	.02	.04	.03	.....
81b	Arterial sclerosis and hypertension	.09	.09	.56	.06	.04	.06	.32
81c	Aortitis	.01	.01	.04	.01	.01	.01	.....
81d	Arteries, other diseases of	.02	.02	.02	.02	.01	.02	.....
82	Embolism and thrombosis	.05	.05	.14	.04	.04	.04	.....
83a	Hemorrhoids	6.03	6.08	10.01	5.55	5.99	5.85	1.83
83b	Varicocele	1.90	1.92	1.49	2.02	.70	1.94	.80
83c	Varicose veins	1.03	1.04	1.13	1.09	.33	1.04	.56
83d	Phlebitis	.18	.19	.31	.18	.09	.18	.....
84a	Status lymphaticus	.00	.00	.....	.00	.01	.00	.....
84b	Lymphatic system, other diseases of.	2.89	2.86	2.16	2.54	5.29	2.91	4.85
85a	Cardiac arrhythmias	.17	.17	.18	.17	.17	.17	.08
85b	Cardiac murmurs, not organic	.04	.04	.07	.04	.01	.04	.....
85c	Cardiac disorders, functional	.41	.42	.41	.44	.21	.42	.....
85d	Bradycardia	.01	.01	.....	.01	.....	.01	.16
85e	Heart block	.01	.01	.02	.00	.....	.00	.08
85f	Tachycardia	.90	.91	.43	.94	.56	.94	.08
85g	Hemorrhage	.14	.14	.27	.13	.14	.13	.24
85h	Circulatory system, other diseases of.	.08	.08	.05	.07	.04	.08	.16

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					24,818	United States Army in Europe (excluding Russia).				
26,669	279,926	27,037	306,963	333,632		488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.75	0.59	0.07	0.55	0.56	0.12	0.14	0.17	0.17	0.16	86d
6.34	3.05	2.40	3.00	3.26	10.28	3.45	2.17	3.53	3.83	86e
.60	.21	.04	.19	.22	.24	.09	.07	.10	.10	86f
.....	.01	.04	.01	.01	.....	.01	.....	.01	.01	86g
16.00	20.66	16.61	20.31	19.96	2.94	4.09	5.53	4.45	4.39	86h
2.48	3.02	3.96	3.10	3.05	.48	.29	.29	.31	.32	86i
3.41	5.02	4.51	4.98	4.85	4.59	3.96	2.18	4.07	4.09	87a
.04	.01	.....	.01	.01	.....	.01	.....	.01	.01	87b
44.33	84.08	79.30	83.66	80.52	21.36	20.57	16.33	21.20	21.20	100a
26.85	10.01	2.44	9.34	10.74	4.72	2.07	.77	2.10	2.22	100b
1.05	.36	.48	.37	.43	.04	.01	.....	.01	.01	100c
17.29	29.65	26.22	29.35	28.39	7.62	5.96	4.78	6.54	6.59	100d
8.14	6.19	1.44	5.77	5.96	9.79	4.28	.89	4.11	4.36	100e
.....	.07	.30	.09	.08	.04	.07	.09	.07	.07	77
.04	.04	.19	.05	.05	.08	.04	.02	.04	.04	78
2.25	5.26	5.36	5.26	5.02	1.85	1.89	2.87	2.13	2.12	79a
.41	.64	1.00	.67	.65	.08	.11	.22	.14	.14	(1)
.....	.08	.11	.08	.08	.04	.03	.05	.03	.03	(2)
1.46	3.23	3.14	3.22	3.08	1.49	1.44	2.22	1.61	1.60	(3)
.26	.83	.85	.83	.78	.16	.23	.32	.26	.26	(4)
.08	.34	.22	.33	.31	.....	.02	.02	.02	.02	(5)
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	(6)
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(7)
.04	.14	.04	.13	.12	.08	.05	.03	.07	.07	(8)
.23	.22	.41	.23	.23	.16	.09	.14	.12	.11	79b
.26	.10	.11	.10	.11	.16	.03	.07	.03	.04	79c
1.24	.75	.96	.77	.81	1.41	.35	.63	.41	.45	79d
.11	.34	.70	.37	.35	.20	.21	.26	.24	.23	79e
.26	.10	.07	.09	.11	.08	.03	.07	.04	.04	80
.04	.05	.11	.06	.06	.04	.01	.02	.01	.01	81a
.83	.12	.11	.12	.17	.36	.04	.02	.04	.05	81b
.04	.01	.04	.01	.01	.04	.01	.....	.01	.01	81c
.....	.01	.04	.01	.01	.....	.00	.....	.00	.00	81d
.15	.06	.07	.07	.07	.12	.03	.03	.03	.04	82
14.21	6.51	7.21	6.57	7.18	6.37	5.49	6.04	5.98	5.99	83a
1.95	2.88	.81	2.70	2.64	1.01	1.69	.68	1.68	1.65	83b
1.80	1.84	.70	1.74	1.74	.56	.76	.20	.74	.74	83c
.45	.35	.19	.34	.34	.20	.10	.05	.10	.11	83d
.....	.00	.04	.01	.01	.....	.00	.....	.00	.00	84a
1.95	3.78	10.88	4.41	4.21	2.62	1.93	3.17	2.23	2.24	84b
.19	.34	.30	.34	.32	.20	.08	.10	.08	.09	85a
.04	.09	.04	.08	.08	.....	.01	.....	.01	.01	85b
.41	1.25	.67	1.20	1.14	.48	.....	.....	.....	.02	85c
.....	.....	.....	.....	.....	.....	.01	.....	.01	.01	85d
.04	.01	.....	.01	.01	.....	.....	.....	.....	.....	85e
.34	1.38	.81	1.33	1.25	.60	.78	.49	.82	.81	85f
.49	.25	.30	.25	.27	.08	.07	.09	.08	.08	85g
.04	.12	.07	.12	.11	.04	.06	.03	.06	.06	85h

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	IX. NASAL FOSSÆ, DISEASES OF—con.						
86d	Turbinate hypertrophy	0.25	0.52		0.37	5.10	0.60
86e	Sinusitis (all)	2.46	2.06	1.95	2.03	1.59	1.00
86f	Polypus nasal						.20
86g	Perforated nasal septum						
86h	Rhinitis (cause not stated)	5.17	6.70	3.25	5.72	6.05	10.00
86i	Nasal fossæ, other diseases of	.25	1.29	.65	1.11	.32	
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal	1.23	1.29		.92	.64	.60
87b	Larynx, other diseases of						
100a	Tonsillitis, acute	11.56	23.44	28.58	24.90	29.30	20.40
100b	Tonsillitis, chronic	3.44	8.24	2.60	6.64	.64	2.60
100c	Tonsils, focal infection from						
100d	Pharyngitis, acute catarrhal	4.67	9.02	5.84	8.12	7.96	2.40
100e	Pharynx, other diseases of	1.72	3.35	2.60	3.14	2.23	.60
	XI. CIRCULATORY SYSTEM, DISEASES OF.						
77	Pericarditis		.26		.18		
78	Endocarditis, acute						
79a	Valvular diseases of the heart	.74	1.80	1.95	1.84	3.82	.80
	(1) Aortic insufficiency			1.30	.37		
	(2) Aortic stenosis						
	(3) Mitral insufficiency	.74	1.55	.65	1.29	3.19	.40
	(4) Mitral stenosis					.32	.20
	(5) Combined lesions, mitral aortic.						.20
	(6) Pulmonic lesions					.32	
	(7) Tricuspid lesions						
	(8) Valvular lesions, unclassified.		.26		.18		
79b	Cardiac hypertrophy			.65	.18	.32	
79c	Cardiac dilatation		.26		.18	.32	
79d	Myocarditis and myocardial insufficiency.	.49	.52	.65	.55		
79e	Heart, other organic diseases of		1.29		.92	.32	
80	Angina pectoris						
81a	Aneurisms						
81b	Arterial sclerosis and hypertension						
81c	Aortitis						
81d	Arteries, other diseases of	.25				3.19	
82	Embolism and thrombosis	.25					
83a	Hemorrhoids	4.67	10.82	7.14	9.78	4.78	6.20
83b	Varicocele	1.48	4.12	1.30	3.32	3.82	3.60
83c	Varicose veins	.25	.52		.37	1.91	.80
83d	Phlebitis						1.00
84a	Status lymphaticus						
84b	Lymphatic system, other diseases of.	.74	4.38	9.09	5.72	2.55	12.40
85a	Cardiac arrhythmias		.52	1.30	.74		
85b	Cardiac murmurs, not organic	.74				.32	.20
85c	Cardiac disorders, functional		2.32	1.30	2.03	.32	.40
85d	Bradycardia		.26		.18		
85e	Heart block						
85f	Tachycardia		.26	.65	.37	3.82	.40
85g	Hemorrhage						
85h	Circulatory system, other diseases of.	.25	.26		.18		

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	International classification No.
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
0.40	0.40					1.92		86d
4.07	4.07	0.08	0.16	0.08	0.36	.96	0.48	86e
								86f
								86g
7.84	7.94	.28	.32	.29	3.34	.48	4.30	86h
.50	.50	.02		.02	.60			86i
8.43	8.53		.16	.02	1.31	.96	1.43	87a
.79	.79							87b
67.86	68.26	3.89	1.43	3.63	6.79	10.07	19.60	100a
4.56	4.76	.15		.13	.48	.96	.96	100b
.10	.10				.12			100c
8.63	8.73	.58	.32	.55	6.20	1.92	19.12	100d
8.83	8.83	.08		.07	.60	.48	.96	100e
								77
.10	.10							78
3.08	3.17	.11		.10	.72	.48	4.30	79a
.10	.10							(1)
								(2)
2.28	2.38	.08		.07	.48	.48	3.35	(3)
.50	.50				.12		.48	(4)
		.02		.02	.12			(5)
								(6)
								(7)
.20	.20	.02		.02			.48	(8)
.30	.30							79b
.40	.69	.02		.02	.12			79c
.60	.60	.04		.03	.12			79d
.10	.10	.02		.02	.24		.48	79e
								80
								81a
					.48			81b
								81c
								81d
								82
8.93	8.93	.06		.05	1.19	5.27	.96	83a
2.08	2.18	.08	.16	.08	.83	.48	.96	83b
1.59	1.59	.02		.02	.36	.48	1.43	83c
.30	.30							83d
.10	.10							84a
3.87	3.97	.21		.18	3.10	1.92	14.82	84b
.60	.60				.12			85a
								85b
.60	.60	.02		.02				85c
		.02		.02	.24			85d
					.12			85e
.79	.79	.02		.02			.48	85f
.10	.10				.24		.48	85g
					.24			85h

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men including native troops.	Total officers and enlisted men American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XII. RESPIRATORY SYSTEM, DISEASES OF.							
89–90	Bronchitis	52.56	52.60	50.71	50.73	49.07	52.71	48.85
91	Pneumonia, broncho	5.91	5.97	3.87	5.34	10.06	6.09	.80
92a	Pneumonia, lobar	5.52	5.54	3.02	4.08	18.07	5.69	3.66
92b	Pneumonia, unclassified	.21	.22	.16	.15	.43	.22	
93a	Pleurisy, suppurative	.44	.44	.32	.41	.53	.45	.08
93b	Pleurisy, serofibrinous	1.67	1.68	.95	1.62	2.06	1.72	.80
93c	Pleura, other diseases of	2.98	2.99	2.02	2.80	4.04	3.05	1.59
96	Asthma	1.13	1.12	1.46	1.01	1.51	1.10	1.51
97	Pulmonary emphysema	.06	.06	.07	.05	.09	.06	
98	Lungs, other diseases of	.16	.16	.18	.15	.12	.16	.08
	XIII. DIGESTIVE SYSTEM, DISEASES OF.							
99a	Pyorrhea alveolaris	.57	.57	1.05	.55	.20	.54	.08
99b	Abscess periapical, focal infection from.	.04	.04	.04	.04	.03	.04	
99c	Mouth and annexa, other diseases of.	3.33	3.33	5.35	3.09	2.91	3.21	3.26
101	Esophagus, diseases of	.01	.01		.01		.01	
102a	Ulcer of the stomach	.33	.33	.83	.31	.17	.30	.24
102b	Gastro-enteroptosis	.16	.16	.45	.15	.03	.14	
102c	Stomach, other diseases of	8.38	8.24	11.10	7.83	7.75	8.07	19.81
105a	Duodenal ulcer	.19	.19	.85	.16	.04	.15	
105b	Diarrhea	2.33	2.29	2.41	2.28	1.60	2.29	5.01
105c	Enteritis and colitis	6.89	6.90	8.77	6.59	5.01	6.79	6.21
106	Ankylostomiasis (uncinariasis, hookworm).	.88	.53	.07	.55	.64	.56	28.80
107a	Ascaris lumbricoides	.17	.06	.02	.05	.21	.07	8.35
107b	Cestodes	.23	.23	.54	.21	.15	.21	.40
107c	Intestinal parasites, others	.15	.12	.07	.13	.06	.13	2.47
108	Appendicitis (all)	8.13	8.20	10.96	7.97	5.49	8.04	2.71
109a	Hernia	8.09	8.17	9.11	8.29	4.38	8.10	2.15
109b	Intestinal obstruction	.15	.15	.22	.15	.07	.14	.48
110a	Fistula in ano	.71	.72	.58	.68	.77	.73	.24
110b	Intestines, other diseases of	11.33	10.74	13.73	10.29	11.43	10.57	57.76
113	Cirrhosis of the liver	.03	.03	.05	.02	.04	.03	.16
114	Cholelithiasis	.09	.09	.38	.08	.05	.07	.16
115a	Cholecystitis	.72	.73	1.72	.66	.47	.67	.16
115b	Gall bladder and bile duct, other diseases of.	1.30	1.30	6.75	.98	.65	.98	.72
115c	Liver, other diseases of	.24	.23	.50	.22	.12	.21	1.27
117b	Peritoneal adhesions	.53	.54	.65	.53	.39	.53	
118a	Pancreatitis	.00	.00	.02	.00		.00	
118b	Visceroptosis	.04	.04	.04	.04	.01	.04	.08
118c	Digestive system, other diseases of.	.11	.11	.20	.09	.11	.10	.24
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).							
119	Nephritis, acute	.60	.60	.54	.59	.29	.61	.24
120	Nephritis, chronic	1.23	1.24	1.21	1.24	.83	1.25	.16
122a	Abscess perinephritic	.02	.02	.02	.02		.02	
122b	Nephroptosis	.02	.02	.02	.03	.01	.02	
122c	Hydronephrosis	.01	.01		.02		.01	.08
122d	Pyogenic infection of the kidneys	.25	.25	.47	.23	.24	.24	
122e	Kidney and annexa, other diseases of.	.34	.34	.94	.28	.39	.31	.24
123	Nephrolithiasis	.41	.41	.99	.38	.16	.38	
124a	Cystitis	.73	.73	1.04	.66	.87	.71	.64
124b	Bladder, other diseases of	.27	.27	.05	.26	.45	.28	.08

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).				International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
	Enlisted men.					Enlisted men.				
Officers.	White.	Colored.	Total.	Total officers and enlisted men.	Officers.	White.	Colored.	Total.	Total officers and enlisted men.	
54.03	66.97	64.84	66.79	65.76	51.58	46.00	47.63	49.85	49.92	89–90
2.63	4.14	9.54	4.62	4.46	5.72	6.67	11.55	7.68	7.59	91
1.35	3.02	19.12	4.44	4.19	5.16	4.99	19.83	6.95	6.87	92a
.15	.15	.67	.20	.19	.20	.17	.38	.27	.26	92b
.23	.63	.78	.65	.61	.44	.35	.49	.41	.41	93a
.56	.92	1.44	.96	.93	1.49	2.20	2.61	2.34	2.30	93b
2.51	3.94	5.10	4.04	3.92	1.77	2.41	3.96	2.79	2.75	93c
1.61	1.65	2.07	1.68	1.68	1.37	.77	1.37	.90	.92	96
.04	.06	.26	.08	.07	.12	.05	.02	.06	.06	97
.23	.25	.15	.24	.24	.08	.10	.10	.13	.13	98
.98	.43	.37	.42	.47	1.25	.63	.15	.63	.65	99a
.08	.10	.07	.09	.09	.....	.02	.02	.02	.02	99b
4.16	3.34	3.22	3.33	3.39	7.25	3.16	3.12	3.40	3.56	99c
.....	.02	.....	.02	.02	.....	.01	.....	.01	.01	101
.83	.36	.15	.34	.38	.93	.31	.17	.31	.33	102a
.64	.25	.....	.23	.26	.28	.11	.05	.11	.12	102b
13.91	12.92	10.25	12.69	12.78	9.90	5.31	6.14	5.82	6.00	102c
1.09	.26	.....	.23	.30	.73	.12	.07	.12	.15	105a
2.29	2.63	1.92	2.57	2.55	1.33	1.66	1.02	1.72	1.70	105b
8.63	6.18	4.36	6.02	6.23	9.39	6.85	5.70	7.32	7.41	105c
.11	1.52	2.07	1.57	1.45	.04	.06	.02	.06	.06	106
.....	.06	.....	.05	.05	.04	.04	.02	.04	.04	107a
.68	.26	.19	.25	.29	.44	.20	.12	.20	.21	107b
.04	.29	.04	.26	.25	.04	.03	.02	.03	.03	107c
12.16	9.70	6.03	9.38	9.60	10.36	7.61	5.10	7.89	8.00	108
13.91	14.12	6.47	13.45	13.48	5.12	5.96	3.89	6.08	6.04	109a
.34	.20	.22	.21	.22	.12	.10	.02	.09	.09	109b
.....	.86	.85	.86	.79	1.29	.65	.80	.73	.75	110a
21.60	20.06	19.79	20.03	20.16	5.36	4.09	6.42	4.62	4.65	110b
.04	.03	.....	.03	.03	.08	.02	.07	.03	.03	113
.30	.09	.....	.08	.10	.52	.08	.07	.07	.09	114
1.95	.77	.78	.77	.86	1.65	.65	.34	.66	.70	115a
1.20	1.12	1.15	1.12	1.13	13.78	1.00	.46	1.00	1.56	115b
.71	.48	.22	.45	.47	.20	.07	.09	.08	.09	115c
.68	.65	.48	.64	.64	.69	.49	.36	.52	.52	117b
.04	.00	.....	.00	.01	.....	.00	.....	.00	.00	118a
.04	.09	.04	.08	.08	.04	.02	.....	.02	.02	118b
.30	.15	.11	.15	.16	.08	.07	.12	.09	.09	118c
.30	.42	.33	.41	.40	.81	.75	.26	.78	.78	119
1.13	.96	.67	.94	.95	1.33	1.55	1.01	1.57	.156	120
.04	.04	.....	.03	.03	.....	.01	.....	.01	.01	122a
.04	.03	.....	.03	.03	.....	.02	.02	.02	.02	122b
.....	.03	.....	.03	.03	.....	.01	.....	.01	.01	122c
.49	.39	.63	.41	.42	.52	.16	.07	.16	.17	122d
1.24	.38	.55	.39	.46	.64	.24	.36	.28	.29	122e
1.13	.49	.07	.46	.51	.97	.34	.22	.36	.38	123
.83	.76	.96	.78	.79	1.33	.65	.85	.73	.75	124a
.08	.28	.63	.31	.29	.04	.27	.43	.30	.29	124b

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89–90	Bronchitis	23.61	45.08	20.78	38.18	58.92	32.99
91	Pneumonia, broncho	.74	.52	1.30	.74	.96	.20
92a	Pneumonia, lobar	.98	3.86	1.30	3.14	4.78	
92d	Pneumonia, unclassified						
93a	Pleurisy, suppurative	.25					
93b	Pleurisy, serofibrinous	.25	2.06	.65	1.66		.60
93c	Pleura, other diseases of	.25	3.09	5.20	3.69	3.19	1.00
96	Asthma	.98	.52	3.25	1.29	1.27	.80
97	Pulmonary emphysema						
98	Lungs, other diseases of	.49	.52	.65	.55		.20
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99a	Pyorrhea alveolaris	.25	.26		.18	.32	.40
99b	Abscess periapical, focal infection from.						
99c	Mouth and annexa, other diseases of.	1.48	11.33	1.30	8.48	2.55	1.60
101	Esophagus, diseases of						
102a	Ulcer of the stomach	.25	.26	.65	.37	.64	
102b	Gastro-enteroptosis	.25					
102c	Stomach, other diseases of		25.25	55.84	33.98	14.65	13.60
105a	Duodenal ulcer						.40
105b	Diarrhea	9.84	9.53	24.68	13.83	2.23	1.80
105c	Enteritis and colitis	5.90	26.53	7.14	21.03	5.73	3.00
106	Ankylostomiasis (uncinariasis, hookworm).		.77	1.95	1.11		.40
107a	Ascaris lumbricoides		1.29	12.34	4.43		
107b	Cestodes	.25		1.30	.37	.64	
107c	Intestinal parasites, others	.49	3.09	2.60	2.95		.20
108	Appendicitis (all)	6.89	14.17	32.47	19.37	21.98	13.20
109a	Hernia	1.97	5.67	2.60	4.80	3.19	
109b	Intestinal obstruction		.26		.18	.64	3.20
110a	Fistula in ano		.77	1.30	.92	.64	1.20
110b	Intestines, other diseases of	13.28	87.84	93.51	89.46	40.16	53.99
113	Cirrhosis of the liver						
114	Cholelithiasis		.26		.18	.32	
115a	Cholecystitis	.74	1.80	.65	1.48	1.27	.60
115b	Gall bladder and bile duct, other diseases of.	.25	1.03	1.95	1.29	.64	.20
115c	Liver, other diseases of	.98	1.29		.92		.60
117b	Peritoneal adhesions	.25	.77	1.30	.92	1.27	.20
118a	Pancreatitis						
118b	Visceroptosis						
118c	Digestive system, other diseases of	.25	.26		.18	.32	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).						
119	Nephritis, acute	.49	.26	.65	.37		
120	Nephritis, chronic	.98	.26	.65	.37	1.91	1.40
122a	Abscess perinephritic						
122b	Nephroptosis						
122c	Hydronephrosis						
122d	Pyogenic infection of the kidneys		.26	.65	.37	.96	.20
122e	Kidney and annexa, other diseases of.	.74	.77		.55	1.27	.40
123	Nephrolithiasis	.25	1.03		.74	.64	.60
124a	Cystitis	.74	1.03	3.25	1.66	1.59	1.00
124b	Bladder, other disease of					.96	

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	International classification No.
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
91.25	91.55	2.72	1.75	2.62	36.82	45.55	100.38	89–90
4.96	5.06	.64	.48	.62	.95	.....	.96	91
10.02	10.02	.51	1.27	.59	3.46	6.71	1.43	92a
.....	.....	.....	.....	.....	.....	.....	.....	92d
.....	.....	.02	.....	.02	.12	.....	.....	93a
2.58	2.58	.04	.....	.03	.72	.....	1.91	93b
4.07	4.17	.32	.....	.29	2.15	.....	.96	93c
.50	.60	.02	.....	.02	1.19	1.92	2.39	96
.....	.....	.....	.....	.....	.....	.....	.....	97
.....	.20	.....	.....	.....	.12	.....	.....	98
3.17	3.17	.02	.....	.02	.....	.....	.48	99a
.....	.....	.....	.....	.....	.....	.....	.....	99b
6.45	6.55	.09	.....	.08	2.74	1.92	6.69	99c
.....	.....	.....	.....	.....	.....	.....	.....	101
.50	.60	.02	.16	.03	.....	.96	.48	102a
.10	.10	.....	.....	.....	.....	.....	.....	102b
14.38	14.38	.69	.16	.64	21.33	20.14	13.38	102c
.....	.....	.....	.....	.....	.....	.....	.....	105a
30.95	30.95	.17	.....	.15	6.55	2.88	.96	105b
30.05	30.15	.90	.79	.89	5.00	.96	16.25	105c
.....	.....	.....	.....	.....	13.58	.....	118.55	106
.10	.10	.....	.....	.....	12.16	.....	1.43	107a
.20	.20	.....	.....	.....	.60	.....	.....	107b
.....	.....	.....	.....	.....	2.86	.....	3.35	107c
8.33	8.33	.32	.16	.30	.95	10.07	2.39	108
9.12	9.42	.15	.32	.17	.72	.48	9.56	109a
.....	.....	.04	.....	.03	.60	.48	.....	109b
.69	.69	.....	.....	.....	.24	.....	.48	110a
26.78	26.88	1.13	2.06	1.23	59.34	16.30	92.74	110b
.....	.....	.02	.....	.02	.12	.....	.48	113
.....	.....	.....	.16	.02	.12	.....	.48	114
1.19	1.19	.06	.32	.08	.....	.48	.48	115a
1.59	1.59	.04	.....	.03	.36	.....	2.87	115b
.79	.79	.....	.....	.....	.36	.....	6.21	115c
.69	.69	.08	.....	.07	.....	.....	.....	117b
.....	.....	.....	.....	.....	.....	.....	.....	118a
.10	.10	.....	.....	.....	.....	.....	.48	118b
.....	.....	.02	.....	.02	.12	.....	.96	118c
.99	.99	.08	.32	.10	.36	.....	.....	119
.60	.60	.04	.....	.03	.24	.....	.....	120
.10	.10	.....	.....	.....	.....	.....	.....	122a
.30	.30	.....	.....	.....	.....	.....	.....	122b
.....	.....	.....	.....	.....	.12	.....	.....	122c
.40	.40	.....	.....	.....	.....	.....	.....	122d
.10	.10	.08	.....	.07	.24	.....	.48	122e
.50	.50	.06	.....	.05	.....	.....	.....	123
.79	.79	.04	.....	.03	.48	.48	1.43	124a
.20	.20	.06	.....	.05	.12	.....	.....	124b

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men including native troops.	Total officers and enlisted men American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL)—continued.							
125a	Urethritis (nonvenereal)	1.43	1.44	1.12	1.40	1.64	1.46	0.56
125b	Stricture (nonvenereal)	.16	.16	.09	.14	.29	.16	.08
125c	Urethra, other diseases of	.01	.01	.04	.01	.02	.01	.....
126	Prostate, diseases of	.23	.24	.74	.21	.15	.21	.....
127a	Balanitis	.50	.51	.41	.49	.60	.51	.16
127b	Epididymitis (nonvenereal)	.70	.70	.65	.65	.80	.70	.80
127c	Hydrocele	.51	.49	.47	.50	.35	.50	1.59
127d	Warts, external genital organs	.35	.35	.20	.35	.40	.36	.08
127e	Genito-urinary system, other diseases of (nonvenereal).	2.37	2.37	1.22	2.40	1.96	2.44	1.91
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.							
142	Gangrene	.01	.01	.....	.00	.02	.01	.08
143a	Carbuncle	.58	.58	1.08	.57	.13	.55	.80
143b	Furuncle	4.29	4.21	3.17	4.47	1.41	4.27	10.58
144a	Abscess	3.26	3.18	2.74	3.17	2.51	3.20	9.87
144b	Cellulitis	2.54	2.48	2.25	2.59	1.05	2.50	6.68
145a	Trichophytoses	1.26	1.16	.61	1.24	.67	1.20	9.07
145b	Nails, defects and diseases of	1.32	1.31	.86	1.40	.37	1.33	2.39
145c	Ectoparasites	.68	.69	.22	.71	.50	.72	.16
145d	Clavus	.00	.00	.....	.00	.01	.00	.....
145e	Dermatitis	.25	.25	.27	.25	.11	.24	.64
145f	Eczema	1.15	1.15	1.13	1.18	.49	1.15	1.51
145g	Erythema	.34	.34	.23	.36	.14	.35	.24
145h	Herpes	.89	.89	.50	.86	1.08	.91	1.04
145i	Impetigo	.96	.97	.74	1.02	.29	.98	.08
145j	Lichen	.02	.02	.02	.02	.02	.02	.....
145k	Nævus	.02	.02	.04	.02	.01	.02	.....
145l	Pityriasis	.13	.13	.13	.14	.02	.13	.....
145m	Psoriasis	.46	.47	.38	.50	.03	.47	.24
145n	Scabies	16.05	16.22	14.22	17.03	3.58	16.34	2.47
145o	Skin and cellular tissue, other diseases of.	4.48	4.44	3.83	4.43	2.85	4.48	7.24
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.							
146a	Osteomyelitis	.18	.18	.11	.18	.15	.18	.....
146b	Fractures, faulty union of	.52	.52	.05	.55	.30	.55	.08
146c	Bones, other diseases of	.51	.51	.56	.49	.45	.51	.40
147a	Ankylosis of joint	.27	.27	.16	.29	.12	.28	.08
147b	Loose bodies in joint	.01	.01	....	.01	.01	.01	.....
147c	Synovitis	.45	.45	.52	.43	.46	.45	.16
147d	Floating cartilage	.05	.06	.04	.06	.01	.06	.....
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).	.16	.16	.20	.16	.07	.16	.08
149a	Hallux valgus	.34	.34	.14	.33	.44	.35	.16
149b	Hammertoe	.17	.16	.07	.17	.07	.17	.56
149c	Metatarsalgia	.18	.18	.18	.18	.10	.18	.....
149d	Myositis	.97	.98	.86	.94	1.10	.98	.72
149e	Pes planus	4.31	4.35	1.08	4.56	2.90	4.55	.48
149f	Talipes	.05	.06	.02	.06	.02	.06	.....
149g	Tenosynovitis	.33	.33	.23	.34	.13	.33	.48
149h	Organs of locomotion, other diseases of.	4.87	4.88	3.60	4.76	5.10	4.96	3.34

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).				
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
1.05	2.23	3.85	2.37	2.27	1.37	1.07	0.84	1.11	1.12	125a
.15	.19	.30	.20	.19	.04	.14	.29	.17	.16	125b
.04	.....	.07	.01	.01	.04	.02	.....	.01	.02	125c
.75	.30	.33	.30	.34	.85	.18	.07	.18	.21	126
.41	.79	1.29	.83	.80	.44	.36	.34	.38	.38	127a
.64	.94	1.44	.98	.95	.69	.55	.61	.61	.62	127b
.60	.84	.63	.82	.81	.36	.36	.27	.37	.37	127c
.23	.75	.89	.76	.72	.20	.16	.12	.17	.17	127d
1.16	1.91	3.18	2.02	1.95	1.41	1.36	1.52	1.52	1.52	127e
.....	.01	.....	.01	.01	.....	.00	.03	.01	.01	142
1.16	.96	.11	.88	.91	1.17	.40	.15	.42	.45	143a
4.39	8.41	2.63	7.90	7.62	2.02	2.46	.70	2.45	2.43	143b
3.00	4.97	4.18	4.90	4.74	2.62	2.29	1.91	2.41	2.42	144a
2.89	3.61	1 81	3.45	3.41	1.81	2.10	.79	2.06	2.05	144b
1.01	2.62	.81	2.46	2.34	.20	.40	.31	.42	.41	145a
.86	2.52	.59	2.35	2.23	.85	.74	.27	.74	.75	145b
.30	1.16	1.44	1.18	1.11	.16	.53	.14	.52	.51	145c
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145d
.30	.46	.19	.44	.43	.24	.12	.09	.13	.13	145e
1.28	1.88	.74	1.78	1.74	1.05	.84	.44	.87	.87	145f
.38	.64	.11	.59	.58	.12	.22	.17	.24	.23	145g
.45	1.42	1.92	1.47	1.39	.60	.59	.82	.66	.66	145h
.56	1.39	.41	1.31	1.25	1.05	.91	.27	.90	.91	145i
.04	.03	.07	.04	.04	.....	.01	.....	.01	.01	145j
.08	.03	.04	.03	.03	.....	.01	.....	.01	.01	145k
.15	.25	.....	.23	.22	.12	.09	.03	.08	.09	145l
.38	.54	.11	.50	.49	.40	.55	.....	.52	.51	145m
13.09	20.40	2.03	18.78	18.33	17.69	17.44	4.78	17.22	17.23	145n
3.94	6.61	5.14	6.48	6.28	4.15	3.43	1.88	3.61	3.64	145o
.11	.34	.22	.33	.31	.12	.12	.14	.12	.12	146a
.08	.94	.59	.91	.84	.04	.37	.20	.40	.36	146b
.60	.67	.55	.66	.65	.60	.44	.44	.48	.49	146c
.26	.74	.19	.69	.66	.08	.07	.09	.08	.08	147a
.....	.03	.04	.03	.03	.....	.01	.....	.01	.01	147b
.45	.66	.89	.68	.67	.64	.34	.32	.37	.38	147c
.....	.11	.04	.11	.10	.08	.03	.....	.03	.04	147d
.15	.29	.07	.27	.26	.28	.10	.09	.11	.12	147e
.23	.51	.44	.51	.49	.08	.26	.49	.30	.29	149a
.08	.26	.07	.24	.23	.08	.13	.09	.13	.13	149b
.19	.27	.19	.26	.26	.20	.14	.07	.15	.15	149c
1.24	1.15	1.07	1.14	1.15	.56	.86	1.21	.95	.93	149d
1.09	7.19	4.29	6.94	6.47	1.13	3.49	2.65	3.66	3.55	149e
1.04	.12	.07	.12	.11	.....	.02	.....	.02	.02	149f
.23	.58	.33	.55	.53	.24	.23	.05	.23	.23	149g
4.39	8.12	7.84	8.10	7.80	2.90	3.18	4.20	3.57	3.54	149h

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL)—continued.						
125a	Urethritis (nonvenereal)		0.77		0.55	3.82	1.00
125b	Stricture (nonvenereal)			0.65	.18		
125c	Urethra, other diseases of						.20
126	Prostate, diseases of			.65	.18		
127a	Balanitis	0.25	.26	.65	.37	1.91	.40
127b	Epididymitis (nonvenereal)	.49	1.29		.92		.60
127c	Hydrocele	.25	.26		.18	1.59	.40
127d	Warts, external genital organs			3.90	1.11	.64	
127e	Genito-urinary system, other diseases of (nonvenereal).	.49	.77	3.90	1.66	.96	.40
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.						
142	Gangrene						
143a	Carbuncle		.26		.18	.96	.20
143b	Furuncle	2.21	8.24	12.99	9.59	12.42	12.20
144a	Abscess	1.72	3.61	6.49	4.43	13.38	8.40
144b	Cellulitis	.74	11.85	1.30	8.85	4.14	10.00
145a	Trichophytoses	.49	8.50	14.94	10.33	5.73	11.20
145b	Nails, defects and diseases of	.98	3.35	1.95	2.95	10.19	8.60
145c	Ectoparasites		.26		.18		.20
145d	Clavus		.52	.65	.55		
145e	Dermatitis	.25				.32	1.40
145f	Eczema	.74	2.32		1.66	1.27	3.00
145g	Erythema		.26		.18	1.27	.40
145h	Herpes	.25	2.06	.65	1.66	1.27	.80
145i	Impetigo		.26		.18	1.59	1.20
145j	Lichen						
145k	Naevus		.26		.18		
145l	Pityriasis		.26		.18	.96	.20
145m	Psoriasis	.25					.20
145n	Scabies	.49	1.29		.92		1.80
145o	Skin and cellular tissue, other diseases of.	1.23	9.53	11.04	9.96	8.92	14.00
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis		.26		.18	.32	.20
146b	Fractures, faulty union of		.52		.37	.32	.60
146c	Bones, other diseases of		.52	.65	.55	1.91	
147a	Ankylosis of joint			.65	.18	.32	
147b	Loose bodies in joint						
147c	Synovitis	.25	.52		.37	.32	
147d	Floating cartilage						
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).		.77		.55	.32	
149a	Hallux valgus		.52		.37		.20
149b	Hammertoe					2.23	.20
149c	Metatarsalgia						.20
149d	Myositis	.25	1.29	1.95	1.48		
149e	Pes planus	.74	4.12		2.95	9.24	1.20
149f	Talipes		.77		.55		
149g	Tenosynovitis	.25				1.59	
149h	Organs of locomotion, other diseases of.	2.71	6.96	12.34	8.48	8.28	5.20

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
1.49	1.49	0.02		0.02	0.36	1.92		125a
			0.16	.02	.12			125b
								125c
.10	.10							126
.50	.50	.04		.03	.12	.48		127a
.79	.79	.02		.02	.24	1.92	1.91	127b
.30	.30					.48	9.08	127c
.50	.50				.12			127d
79.66	79.66	.24	.32	.25	1.55	.48	4.78	127e
					.12			142
1.19	1.19	.04		.03	.95		.96	143a
7.14	7.44	.11		.10	12.39	.48	13.39	143b
5.55	5.75	.26		.24	7.75	5.27	22.94	144a
2.68	2.78	.23	16	.22	6.67	3.36	10.04	144b
.89	.99				12.15	1.92	3.82	145a
2.88	2.88				2.38	1.44	3.35	145b
1.69	1.69	.06		.05	.24			145c
								145d
1.39	1.39	.02		.02	.48	1.92		145e
2.38	2.38	.11		.10	1.55	1.44	1.43	145f
.79	.79	.04		.03	.24	.48		145g
2.28	2.28	.02		.02	.83	1.44	1.43	145h
.99	.99	.06		.05	.12			145i
		.02		.02				145j
.20	.20							145k
.40	.40							145l
.40	.40				.36			145m
7.64	7.64	.86		.77	1.31	8.63	.96	145n
6.65	6.84	.19		.17	7.03	7.67	7.65	145o
.10	.20							146a
1.29	1.29	.02		.02		.48		146b
.10	.10	.02		.02	.24	.96	.48	146c
					.12			147a
								147b
.40	.40	.02		.02	.24			147c
.10	.10							147d
.10	.10	.02		.02			.48	147e
.60	.60				.12		.48	149a
.20	.20						3.35	149b
.69	.69							149c
3.77	3.77	.09		.08	.83	.96		149d
7.44	7.54	.13		.12		1.92	.96	149e
.20	.20							149f
.79	.79				.24	1.92		149g
10.32	10.71	.09		.08	3.57	2.40	3.35	149h

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,551	843,451	93,474	936,924	12,569
		Total officers and enlisted men including native troops.	Total officers and enlisted men American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.							
150	Congenital malformations	0.43	0.42	0.79	0.40	0.27	0.40	0.80
189	Not specified or ill-defined diseases	22.14	22.14	20.61	20.87	24.99	22.24	21.72
	Total for diseases	555.40	555.87	497.79	531.13	572.06	559.32	518.02
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.							
1	Bites	.15	.15	.11	.15	.12	.15	.16
2	Burns	1.63	1.63	1.10	1.64	1.04	1.66	1.59
3	Burns, chemical and X-ray	.39	.39	.23	.40	.22	.40	.16
4	Compression (brain)	.00	.00	.....	.00	.....	.00	.....
5	Concussion (brain)	.39	.38	.72	.35	.20	.36	.56
6	Contusion	7.90	7.87	5.49	7.63	8.08	8.01	10.90
7	Crushing	.31	.31	.77	.25	.28	.28	.08
8	Dermatitis from traumatisim	.85	.87	1.22	.91	.15	.86	.32
9	Dislocation of joint	1.04	1.04	.94	1.02	.79	1.04	1.11
10	Dislocation, articular, cartilage of knee.	.20	.21	.29	.21	.07	.20	.08
11	Drowning (except suicides)	.10	.10	.07	.10	.05	.10	.08
12	Epiphyseal separation	.03	.04	.02	.04	.....	.04	.....
13	Eye and annexa, traumatisms	.53	.53	.29	.49	.62	.54	.80
14	Foreign bodies	.34	.35	.11	.33	.47	.36	.08
15	Fracture, simple	9.33	9.38	8.53	9.40	5.57	9.43	4.85
16	Fracture, compound	1.48	1.49	1.71	1.37	1.37	1.48	.88
17	Fracture, faulty union	.01	.01	.04	.01	.01	.01	.....
18	Gases, deleterious, absorption of	.14	.14	.22	.12	.16	.14	.08
19	Gunshot wound	.....	.....	.....	.....	.....	.....	.....
20	Hemorrhage and results	.08	.07	.05	.07	.06	.07	.48
21	Homicides	.04	.04	.05	.03	.04	.04	.....
22	Poisoning by food	.46	.47	.67	.46	.33	.46	.16
23	Poisoning, other acute	.20	.20	.23	.20	.12	.20	.16
24	Secondary result of injury	.37	.37	.40	.34	.33	.37	.08
25	Sprain of joint	9.43	9.55	5.63	9.70	7.45	9.78	11.46
26	Strain	1.98	1.98	1.08	2.03	1.44	2.03	2.15
27	Suicide	.14	.14	.31	.12	.02	.13	.48
28	Synovitis, traumatic, cause undetermined.	.70	.71	.81	.68	.64	.70	.24
29	Venomous bites and stings	.20	.19	.14	.20	.06	.19	.96
30	Wounds, multiple	1.11	1.12	1.48	.99	.95	1.09	.64
31	Wounds, penetrating	.66	.66	.40	.72	.31	.68	.16
33	Wounds, perforating	.37	.37	.31	.33	.59	.38	.....
34	Wounds, others	13.87	13.67	7.63	12.91	18.03	14.03	28.88
35	Traumatisms, others	4.55	4.49	3.82	4.58	2.64	4.53	9.95
	Total for diseases	555.40	555.87	497.79	531.13	572.06	559.32	518.02
	Total for external causes	59.14	58.90	44.86	57.79	52.24	59.74	77.49
	Grand total	614.54	614.77	542.65	588.92	624.30	619.06	595.69
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.							
1	Knife	.90	.89	.47	.86	1.41	.91	1.35
2	Pistol ball	.74	.74	.70	.67	1.07	.75	.56
3	Rifle ball	.59	.60	.31	.50	1.07	.61	.40
4	Shotgun	.05	.05	.04	.05	.09	.06	.....
5	Cutting and piercing instruments (other).	3.32	3.27	1.12	3.27	3.86	3.40	7.00

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).				International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
1.20	0.52	0.30	0.50	0.55	0.40	0.37	0.29	0.38	0.38	150
25.51	40.80	53.30	41.90	40.59	16.44	10.73	13.29	12.64	12.81	189
544.42	763.02	950.81	779.56	760.77	492.91	436.88	450.01	479.46	480.05	.....
										Official classification.
.15	.21	.18	.21	.21	.08	.12	.09	.12	.12	1
1.46	2.34	1.52	2.27	2.20	.89	1.35	.92	1.45	1.43	2
.26	.75	.26	.70	.67	.24	.23	.20	.25	.25	3
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	4
.86	.50	.22	.47	.50	.56	.29	.22	.33	.34	5
6.26	11.72	11.98	11.74	11.30	5.48	5.93	6.89	6.61	6.56	6
.135	.31	.30	.31	.39	.28	.24	.31	.30	.30	7
2.06	2.07	.30	1.92	1.93	.52	.28	.07	.28	.29	8
1.20	1.52	1.01	1.48	1.45	.69	.84	.69	.90	.89	9
.30	.28	.07	.26	.26	.32	.18	.09	.18	.19	10
.15	.18	.11	.17	.17	.....	.04	.03	.05	.05	11
.....	.07	.....	.07	.06	.04	.02	.....	.02	.02	12
.34	.72	.85	.73	.70	.28	.39	.53	.47	.46	13
.11	.48	.55	.49	.46	.13	.27	.49	.32	.31	14
8.89	10.66	6.18	10.26	10.15	9.15	9.44	5.85	9.75	9.72	15
1.80	1.32	1.37	1.33	1.36	1.89	1.50	1.54	1.08	1.69	16
.08	.01	.04	.01	.02	.....	.02	.....	.01	.01	17
.07	.08	.04	.07	.08	.28	.17	.24	.20	.20	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
.11	.14	.15	.14	.14	.....	.03	.03	.04	.03	20
.08	.04	.07	.04	.04	.04	.02	.03	.04	.04	21
.79	.98	.33	.92	.90	.60	.09	.03	.10	.13	22
.26	.33	.18	.32	.31	.24	.13	.10	.14	.14	23
.38	.59	.52	.58	.56	.44	.23	.29	.26	.27	24
7.12	16.27	14.54	16.12	15.40	4.67	6.18	4.35	6.51	6.43	25
1.61	3.75	2.81	3.67	3.50	.64	1.08	.97	1.17	1.14	26
.30	.24	.07	.22	.23	.36	.06	.....	.08	.09	27
1.01	.84	.92	.85	.86	.73	.66	.60	.70	.70	28
.15	.35	.11	.33	.32	.16	.09	.03	.09	.09	29
1.73	1.05	.87	1.04	1.09	1.45	1.05	1.08	1.23	1.24	30
.23	.59	1.07	.64	.60	.60	.85	.....	.76	.75	31
.49	.41	.92	.45	.46	.16	.28	.49	.34	.33	33
8.92	23.43	25.86	23.65	22.47	7.09	7.19	14.44	9.03	8.94	34
4.84	8.01	2.77	7.55	7.33	3.10	2.69	2.20	2.88	2.89	35
544.42	763.02	950.81	779.56	760.77	492.91	436.88	450.01	479.46	480.05	
53.40	90.23	76.24	89.00	86.16	41.14	41.96	42.84	46.30	46.07	
597.82	853.25	1,027.05	868.55	846.93	534.05	478.81	492.85	525.76	526.12	
.11	1.58	2.48	1.65	1.53	.89	.48	.96	.54	.55	1
.94	.76	1.48	.82	.83	.56	.65	1.01	.75	.75	2
.15	.46	.96	.51	.48	.52	.50	1.21	.67	.66	3
.08	.11	.22	.12	.12	.....	.02	.03	.02	.02	4
1.09	5.95	6.92	6.03	5.64	1.25	1.82	2.70	2.03	2.00	5

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.						
150	Congenital malformations	0.47	0.52		0.37	1.59	0.40
189	Not specified or ill-defined diseases	13.77	35.81	72.09	46.11	43.32	34.40
	Total for diseases	221.79	832.56	811.69	826.63	579.62	584.48
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
1	Bites		.26	.65	.37	.64	.20
2	Burns		1.55	1.30	1.48	3.50	2.60
3	Burns, chemical and X-ray		1.29	1.30	1.29	.32	.80
4	Compression (brain)						
5	Concussion (brain)	.74				2.55	
6	Contusion	.49	11.34	16.88	12.91	35.67	8.60
7	Crushing					.32	
8	Dermatitis from traumatism		3.09	1.30	2.58	7.64	2.00
9	Dislocation of joint	.74	1.29	3.90	2.03	1.27	1.20
10	Dislocation, articular, cartilage of knee.						.40
11	Drowning (except suicides)		.26		.18	.32	.40
12	Epiphyseal separation					.96	
13	Eye and annexa, traumatisms		1.03	2.60	1.48	1.59	.60
14	Foreign bodies		.52		.37	1.27	
15	Fracture, simple	2.95	8.76	5.19	7.74	30.25	17.20
16	Fracture, compound		1.03	.65	.92	4.46	1.60
17	Fracture, faulty union						
18	Gases deleterious, absorption of						
19	Gunshot wound						
20	Hemorrhage and results		.26		.18	.32	
21	Homicides						.40
22	Poisoning by food	.25	16.48	12.99	15.49		.40
23	Poisoning, other acute		1.03		.74	1.27	.20
24	Secondary result of injury	.25	.52		.37	.96	.60
25	Sprain of joint	1.72	22.15	30.52	24.54	39.81	25.20
26	Strain	.25	5.15	1.30	4.06	7.96	3.60
27	Suicide		.52		.37	.32	.40
28	Synovitis, traumatic, cause undetermined.		.52		.37	.64	.20
29	Venomous bites and stings		1.81	.65	1.48	.96	2.00
30	Wounds, multiple		1.55	1.30	1.48	.32	1.80
31	Wounds, penetrating	.25				.64	.60
33	Wounds, perforating		.77		.55	.64	1.00
34	Wounds, others	2.46	31.17	89.62	47.77	45.23	51.60
35	Traumatisms, others	1.47	10.82	27.92	15.67	17.20	14.00
	Total for diseases	221.79	832.56	811.69	826.63	579.62	584.48
	Total for external causes	11.56	123.13	198.05	144.41	207.01	137.57
	Grand total	233.35	955.69	1,009.74	971.04	786.63	722.05
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.						
1	Knife	.25	1.29	5.84	2.58	4.46	3.00
2	Pistol ball			.65	.18	1.27	1.80
3	Rifle ball		.77	1.30	.92	1.59	1.00
4	Shotgun						.20
5	Cutting and piercing instruments, others.	.49	9.02	10.39	9.41	13.06	12.00

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	International classification No.
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
0.30	0.30				0.60		2.39	150
34.02	34.71	2.89	0.79	2.67	21.92	15.34	27.25	189
1,085.80	1,093.33	41.39	23.03	39.45	487.52	329.82	827.92	
								Office classification.
.30	.30				.12		.48	1
3.07	3.07	.08		.07	1.31	1.92	2.39	2
.50	.50	.02		.02			.96	3
								4
.20	.30	.02		.02	.24	1.92	.48	5
4.27	4.36	.32	.16	.30	9.41	9.11	18.64	6
.20	.20					.48		7
.79	.79	.02		.02	.48			8
.89	.89	.08		.07	.95	1.44	1.43	9
.30	.30	.02		.02			.48	10
.60	.60	.02		.02		.48		11
.10	.10							12
.79	.79				.72		1.91	13
.79	.79					.48		14
9.72	9.82	.69	.48	.67	3.10	8.63	8.13	15
2.68	2.78	.08		.07	.60	1.44	1.43	16
								17
.10	.10				.12			18
								19
.10	.10	.02		.02	.60		.48	20
								21
.20	.20	.02		.02	.24			22
.20	.20				.24			23
.60	1.79				.12			24
23.90	24.00	.56	.16	.52	12.04	9.11	11.47	25
6.45	7.04	.11		.10	2.15	1.44	2.87	26
.30	.30				.12	.48	1.91	27
1.19	1.19	.04		.03	.12	.48	.48	28
.50	.60				1.07	.48	.96	29
1.49	1.49	.02		.02	.12	1.44	1.91	30
1.79	1.79	.02		.02	.24			31
1.69	1.69		.16	.02				33
26.38	26.38	.53	.32	.50	30.86	17.74	32.03	34
12.10	12.10	.30		.27	10.49	7.19	10.52	35
1,085.80	1,093.33	41.39	23.03	39.45	487.52	329.82	827.92	
102.16	104.54	2.95	1.27	2.77	75.44	64.24	98.95	
1,187.96	1,197.87	44.34	24.30	42.22	562.96	394.06	926.87	
.69	.69	.08		.07	1.07	1.44	2.39	I
1.98	1.98				.36		1.91	2
3.37	3.67		.16	.02	.12	.96	.96	3
.10	.10							4
5.85	6.05	.13		.12	8.22	2.40	6.69	5

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

Official classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,921	12,569
		Total officers and enlisted men including native troops.	Total officers and enlisted men American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.							
6	Other military agents	1.01	1.01	0.74	0.77	1.26	1 03	0.88
7	Sinking ships	.00	.00	.....	.00	.....	.00	.....
8	Air machines	.52	.53	4.21	.33	.02	.31	.....
9	Automobiles	3.43	3.45	4.37	3.48	1.16	3.39	1.75
10	Motorcycles	2.01	2.03	3.69	2.06	.43	1.93	.40
11	Railroad accidents	.76	.77	.29	.68	.77	.79	.24
12	Street car accidents	.19	.18	.18	.19	.07	.18	.40
13	Other vehicles	1.77	1.77	.88	1.73	1.81	1.82	2.15
14	Animals	2.10	2.08	.74	2.14	1.51	2.16	3.50
15	Conflagrations	.02	.02	.04	.02	.....	.02	.....
16	Crushing	1.93	1.92	1.08	1.88	2.35	1.97	2.39
17	Electricity	.05	.05	.05	.05	.04	.05	.....
18	Falls	10.00	9.93	8.14	9.85	8.20	10.03	16.79
19	Falling objects	1.88	1.84	.38	1.73	3.25	1.93	4.77
20	Splinters	.21	.21	.02	.21	.25	.22	.32
21	Machinery	.25	.24	.04	.26	.25	.26	.48
22	Other industrial agents	.67	.67	.47	.61	.87	.69	.16
23	Excessive cold	.22	.23	.14	.21	.31	.23	.....
24	Excessive heat	.37	.37	.22	39	.21	.38	.64
25	Land or snow slides	.00	.00	.....	.....	.....	.00	.....
26	Lightning	.00	.01	.....	.01	.....	.01	.....
27	Stones	.17	17	.07	.13	.46	.17	.64
28	Strangulation	.02	.02	.....	.02	.....	.02	.....
29	Jumping	.44	.44	.16	.46	.35	.46	.16
30	Hot liquids	.74	.74	.34	.76	.46	.76	.96
31	Fire, conflagrations excepted	.24	.24	.04	.25	.19	.25	.16
32	Poisons	.02	.02	.02	.02	.01	.02	.....
33	Athletic exercises	7.56	7.56	4.86	7.76	5.44	7.72	7.32
34	Drilling and marching	.54	52	.72	.50	.52	.51	1.75
35	Fighting (brawls)	.99	.98	.04	.96	1.41	1.04	1.27
36	Other external agents	15.42	15.35	10.31	15.01	13.14	15.65	21.08
	Total	59.14	58.90	44.86	57.79	52.24	59.74	77.49

The ratios for admissions shown above are shown under the diagnosis.

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).				
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	Official classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.53	0.63	0.74	0.64	0.63	1.09	0.90	1.66	1.34	1.32	6
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	7
7.27	.76	.04	.70	1.23	1.49	.12	.02	.13	.19	8
5.36	5.37	2.07	5.08	5.10	3.95	2.79	.85	2.84	2.88	9
2.55	2.61	.86	2.46	2.46	5.48	1.97	.27	1.84	2.00	10
.23	.48	.33	.47	.45	.40	.86	1.06	1.05	1.03	11
.34	.42	.19	.40	.40	.04	.08	.03	.08	.08	12
.71	2.35	1.92	2.31	2.18	1.17	1.55	1.96	1.74	1.72	13
1.01	3.70	3.11	3.65	3.43	.52	1.37	.46	1.41	1.38	14
.08	.04	.....	.03	.04	.....	.01	.....	.01	.01	15
1.16	3.24	3.25	3.24	3.08	1.09	1.22	1.91	1.37	1.36	16
.04	.06	.....	.06	.05	.08	.05	.07	.06	.06	17
9.56	14.57	12.32	14.37	13.97	7.21	7.28	6.52	7.79	7.77	18
.53	2.79	4.48	2.94	2.75	.28	1.21	3.11	1.49	1.44	19
.04	.43	.63	.45	.41	.....	.10	.09	.11	.10	20
.04	.47	.33	.46	.43	.04	.16	.22	.16	.16	21
.34	.43	.26	.42	.41	.68	.77	1.26	.91	.90	22
.11	.17	.63	.21	.20	.20	.11	.20	.14	.14	23
.38	.76	.37	.72	.70	.08	.18	.15	.19	.19	24
.....	.....	.....	.....	.....	.....	.....	.....	.00	.00	25
.....	.02	.....	.02	.02	.....	.....	.....	.....	.....	26
.08	.16	.44	.19	.18	.08	.12	.44	.17	.17	27
.....	.04	.....	.04	.03	.....	.01	.....	.01	.01	28
.19	.57	.59	.57	.54	.16	.43	.26	.43	.42	29
.34	1.14	.70	1.10	1.04	.40	.59	.39	.63	.62	30
.....	.36	.26	.36	.33	.08	.20	.17	.21	.21	31
.....	.04	.....	.04	.03	.04	.01	.02	.01	.01	32
5.92	12.74	10.32	12.53	12.00	4.35	5.46	3.67	5.60	5.55	33
1.09	1.01	.74	.99	1.00	.36	.20	.05	.19	.20	34
.08	1.23	2.00	1.29	1.20	.....	.84	1.28	.94	.90	35
13.09	24.77	17.60	24.14	23.26	8.62	9.90	10.79	11.40	11.28	36
53.40	90.23	76.24	89.00	86.16	41.14	41.96	42.84	46.30	46.07	

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

Official classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.						
6	Other military agents		0.77		0.55	0.64	1.40
7	Sinking ships					.32	
8	Air machines	0.74				.32	.20
9	Automobiles	.49	2.32	1.30	2.03	7.01	6.20
10	Motor cycles	.25	2.06	.65	1.66	7.32	2.40
11	Railroad accidents		.26	.65	.37		.20
12	Street-car accidents		.26		.18	.32	
13	Other vehicles	.25	.52	1.30	.74	2.55	2.80
14	Animals	.25	2.83	19 48	7.56	13.06	5.00
15	Conflagrations						
16	Crushing	.49	1.55	12.99	4.80	12.74	4.00
17	Electricity					.32	
18	Falls	4.43	23.44	31.17	25.64	41.72	27.80
19	Falling objects		2.83		2.03	5.41	4.80
20	Splinters			.65	.18	1.27	.40
21	Machinery			.65	.18	.64	1.00
22	Other industrial agents					1.27	.80
23	Excessive cold						
24	Excessive heat		2.32	.65	1.84	.64	.80
25	Land or snow slides						
26	Lightning						
27	Stones			3.25	.92	.64	.20
28	Strangulation						.20
29	Jumping		.26	1.30	.55	2.23	.60
30	Hot liquids		.77	.65	.74	1.27	1.00
31	Fire, conflagrations excepted		.26	.65	.37	1.91	.40
32	Poisons						
33	Athletic exercises	.98	15.71	9.09	13.83	22.61	17.00
34	Drilling and marching	.49	.77	16.88	5.35	3.82	1.40
35	Fighting (brawls)		3.86	1.95	3.32	3.50	3.00
36	Other external agents	2.46	51.26	76.63	58.47	55.09	37.98
	Total	11.56	123.13	198.05	144.41	207.01	137.57

The ratios for admissions shown above are shown under the diagnosis.

TABLE XVI.—*Admissions, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	Official classification No.
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
2.08	2.58	.....	0.16	0.02	0.95	0.48	0.96	6
.....	.....	.....	.....	.....	.....	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	8
.60	.60	.....	.....	.....	.24	4.31	5.26	9
.40	.40	0.04	.....	.03	.12	1.44	.48	10
2.08	2.08	.....	.....	.....	.12	.48	.48	11
.....	.....	.....	.....	.....	.48	.48	.....	12
1.49	1.49	.....	.....	.....	.95	2.40	6.69	13
2.38	2.38	.....	.....	.....	4.77	.96	.96	14
.....	.....	.....	.....	.....	.....	.....	.....	15
1.79	1.79	.06	.....	.05	3.10	1.44	.48	16
.....	.....	.....	.....	.....	.....	.....	.....	17
23.71	23.90	1.43	.48	1.33	17.04	13.90	18.64	18
3.07	3.07	.08	.16	.08	4.53	4.31	6.21	19
.20	.20	.....	.....	.....	.24	.48	.48	20
.10	.10	.....	.....	.....	.....	1.44	1.43	21
.69	.69	.02	.....	.02	.12	.....	.48	22
7.24	7.54	.....	.....	.....	.....	.....	.....	23
.99	.99	.06	.....	.05	.48	.96	.96	24
.....	.....	.....	.....	.....	.....	.....	.....	25
.....	.....	.....	.....	.....	.....	.....	.....	26
.20	.20	.....	.....	.....	.60	.96	.48	27
.....	.....	.....	.....	.....	.....	.....	.....	28
.40	.50	.....	.....	.....	.24	.....	.....	29
1.49	1.59	.04	.....	.03	.95	.96	.96	30
.30	.30	.....	.....	.....	.12	.....	.48	31
.....	.....	.....	.....	.....	.....	.....	.....	32
8.43	8.53	.17	.....	.15	5.24	8.15	14.82	33
1.98	1.98	.....	.....	.....	2.15	.48	1.43	34
1.79	1.79	.06	.....	.05	1.55	.96	.48	35
28.76	29.36	.81	.32	.76	21.69	14.86	24.85	36
102.16	104.54	2.95	1.27	2.77	75.44	64.24	98.95	

TABLE XVII.—*Deaths, United States Army, 1919.*

ABSOLUTE NUMBERS.

International classification number.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).								
1	Typhoid fever	71	71	3	54	8	6	68	
4	Malarial fevers (all)	9	7		6	1		7	2
5	Smallpox	9	9		8	1		9	
6	Measles (all)	50	50		46	3	1	50	
7	Scarlet fever	42	42	3	38		1	39	
9	Diphtheria and results	40	40	2	34		4	38	
10	Influenza (all)	1,768	1,766	78	1,448	120	120	1,688	2
12	Asiatic cholera	7	2		2			2	5
14	Dysentery (all)	14	12	1	10	1		11	2
18	Erysipelas	9	9	1	7	1		8	
19g	Meningitis, cerebrospinal (epidemic).	339	338	13	246	52	27	325	1
19h	Mumps	19	18	1	12	5		17	1
19i	Paratyphoid A	3	3		2	1		3	
19j	Paratyphoid B	2	2		2			2	
19p	Epidemic diseases, others	7	7	1	4	1	1	6	
20a	Septicemia, general	24	24		18	5	1	24	
47	Acute articular rheumatism.	11	10	1	7	2		9	1
	II. TUBERCULOSIS.								
28a	Tuberculosis of lungs	1,245	1,237	22	686	486	43	1,215	8
29	Acute miliary tuberculosis	117	115	3	49	56	7	112	2
30–35	Tuberculosis, others	143	140	2	79	54	5	138	3
	Tuberculosis (all)	1,505	1,492	27	814	597	55	1,465	13
	III. VENEREAL DISEASES (ALL).								
37	Syphilis (all)	26	25	2	10	13		23	1
37d	Syphilis, tertiary	21	20	1	8	11		19	1
37e	Syphilis, unclassified	5	5	1	2	2		4	
38b	Gonococcus infection	6	6	1	4	1		5	
	Venereal (all)	32	31	3	14	14		28	1
	IV. GENERAL DISEASES (OTHER).								
39–45	Cancer and other malignant tumors.	56	55	7	42	5	1	48	1
46	Tumors, benign	11	11	1	7	1	2	10	
48a	Arthritis	9	9		9			9	
50	Diabetes, mellitus	24	24	1	18	4	1	23	
51a	Exophthalmic goiter (hyperthyroidism).	1	1		1			1	
52a	Addison's disease	3	3		3			3	
53a	Leukemia	11	10	1	9			9	1
53b	Hodgkin's disease	4	4	1	3			3	
54	Anemia, chlorosis	6	6	1	4		1	5	
55c	Purpura	3	3		2	1		3	
55e	General diseases, others	7	7		6	1		7	
56a	Alcoholism (acute or chronic).	9	9	1	7		1	8	
56b	Drug addiction	1	1			1		1	
57–59	Poisoning, chronic	1	1			1		1	

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification number.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
2	5	3	8	10	1	48	5	6	59	60	1
.....	3	1	4	4	.....	1	.....	.....	1	1	4
.....	1	.....	1	1	.....	3	.....	.....	3	3	5
.....	35	3	38	38	.....	10	.....	1	11	11	6
1	25	.....	25	26	2	13	.....	1	14	16	7
1	16	.....	16	17	1	18	.....	4	22	23	9
24	531	30	561	585	53	883	89	120	1,092	1,145	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
1	1	1	2	3	.....	5	.....	.....	5	5	14
1	5	1	6	7	.....	2	.....	.....	2	2	18
4	60	14	74	78	9	181	37	27	245	254	19g
.....	7	3	10	10	1	5	2	.....	7	8	19h
.....	.....	.....	.....	.....	.....	2	1	.....	3	3	19i
.....	1	.....	1	1	.....	1	.....	.....	1	1	19j
1	2	.....	2	3	.....	1	1	1	4	4	19p
.....	12	3	15	15	.....	6	2	1	9	9	20a
1	5	2	7	8	.....	2	.....	.....	2	2	47
15	355	243	598	613	6	326	243	42	611	617	28a
1	18	14	32	33	2	30	4	7	78	80	29
2	26	18	44	46	.....	51	36	5	92	92	30–35
18	399	275	674	692	8	407	320	54	781	789	
2	5	7	12	14	.....	5	6	.....	11	11	37
1	4	6	10	11	.....	4	5	.....	9	9	37d
1	1	1	2	3	.....	1	1	.....	2	2	37e
.....	2	1	3	3	1	2	.....	.....	2	3	38b
4	7	8	15	17	1	7	6	.....	13	14	
6	27	4	31	37	1	14	.....	1	15	16	39–45
1	5	.....	5	6	.....	2	1	2	5	5	46
.....	4	.....	4	4	.....	5	.....	.....	5	5	48a
1	11	2	13	14	.....	7	2	1	10	10	50
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	51a
.....	2	.....	2	2	.....	1	.....	.....	1	1	52a
1	3	.....	3	4	.....	6	.....	.....	6	6	53a
1	.....	.....	.....	1	.....	3	.....	.....	3	3	53b
1	2	.....	2	3	.....	2	.....	1	3	3	54
.....	.....	.....	.....	.....	.....	2	1	.....	3	3	55c
.....	3	1	4	4	.....	2	.....	.....	2	2	55e
.....	6	.....	6	6	1	1	.....	1	2	3	56a
.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	56b
.....	.....	.....	.....	.....	.....	.....	1	.....	1	1	57–59

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
4	Malarial fevers (all)		1		1		1
5	Smallpox		1		1		
6	Measles (all)						
7	Scarlet fever						
9	Diphtheria and results						
10	Influenza (all)	1	1		1	1	
12	Asiatic cholera		2		2		
14	Dysentery (all)		4		4		
18	Erysipelas						
19g	Meningitis, cerebrospinal (epidemic).						
19h	Mumps						
19i	Paratyphoid A						
19j	Paratyphoid B						
19p	Epidemic diseases, other						
20a	Septicemia, general						
47	Acute articular rheumatism.						
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs	1				1	1
29	Acute miliary tuberculosis						
30–35	Tuberculosis, others						
	Tuberculosis (all)	1				1	1
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)						
37d	Syphilis, tertiary						
37e	Syphilis, unclassified						
38b	Gonococcus infection						
	Venereal (all)						
	IV. GENERAL DISEASES (OTHER).						
39–45	Cancer and other malignant tumors.			1	1		
46	Tumors, benign						
48a	Arthritis						
50	Diabetes, mellitus						
51a	Exophthalmic goiter (hyperthyroidism).						
52a	Addison's disease						
53a	Leukemia						
53b	Hodgkin's disease						
54	Anemia, chlorosis						
55c	Purpura						
55e	General diseases, others						
56a	Alcoholism (acute or chronic).						
56b	Drug addiction						
57–59	Poisoning, chronic						

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
			1		1				1
						1		1	4
3		3		1	1				5
1		1							6
									7
									9
15		15	17	1	18		2		10
						5			12
						2			14
									18
1		1	4	1	5			1	19g
						1			19h
									19i
									19j
									19p
									20a
						1			47
3	1	4				4	3	1	28a
1		1		1	1	2			29
1		1	1		1	2		1	30–35
5	1	6	1	1	2	8	3	2	
								1	37
								1	37d
									37e
									38b
								1	
			1		1	1			39–45
									46
									48a
									50
									51a
									52a
								1	53a
									53b
									54
									55c
1		1							55e
									56a
									56b
									57–59

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification number.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	V. NERVOUS SYSTEM, DISEASES OF (ALL).								
60	Encephalitis	14	14	1	11	1	1	13	
61	Meningitis, simple	60	60	1	37	14	8	59	
63b	Spinal cord, diseases of (others).	7	7		5	2		7	
64	Apoplexy	12	12	3	4	5		9	
66b	Paraplegia	1	1			1		1	
66c	Paralysis without specified cause (others).	3	2		2			2	1
69	Epilepsy	3	3		2		1	3	
74e	Neuro-circulatory asthenia (disordered action of the heart).	2	2		1		1	2	
74g	Nervous system, other diseases of.	27	27	1	23	1	2	26	
	VI. MENTAL ALIENATION.								
67	General paralysis of the insane.	12	12	3	5	4		9	
68d	Dementia præcox	3	3		2	1		3	
68h	Psychosis, manic depressive.	4	4		2	2		4	
68i	Psychosis (others)	6	6		6	1		6	
	VII. EYES AND THEIR ANNEXA, DISEASES OF.								
75r	Eyes and annexa, diseases of.	6	6		6			6	
	VIII. EAR, DISEASES OF.								
76a	Otitis media	53	53	1	48	2	2	52	
76b	Mastoiditis	24	24		22	1	1	24	
	IX. NASAL FOSSÆ, DISEASES OF.								
86d	Turbinate hypertrophy	2	2		1	1		2	
86e	Sinusitis (all)	9	9	1	7	1		8	
86i	Nasal fossæ, other diseases of.	1	1	1					
	X. THROAT, DISEASES OF.								
87a	Laryngitis, acute catarrhal	1	1		1			1	
100a	Tonsillitis, acute	55	55	4	47	4		51	
100b	Tonsillitis, chronic	8	8	2	6			6	
100e	Pharynx, other diseases of.	7	7	1	5	1		6	
	XI. CIRCULATORY SYSTEM, DISEASES OF.								
77	Pericarditis	14	14		9	5		14	
78	Endocarditis, acute	14	14	1	11	1	1	13	

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.	
	6		6	6	1	5	1		6	7
	10	7	17	17	1	27	7	8	42	43
	4	1	5	5		1	1		2	2
2		3	3	5	1	4	2		6	7
							1		1	1
	1		1	1		1		1	2	2
	1		1	1				1	1	1
	11	1	12	12	1	10		2	12	13
3	2	1	3	6		3	3		6	6
	2	1	3	3						
	2		2	2			2		2	2
	1		1	1		4	1		5	5
	5		5	5						
1	23	1	24	25		23	1	2	26	26
	15		15	15		7	1	1	9	9
						1	1		2	2
1	5	1	6	7		2			2	2
1				1						
	1		1	1						
2	33	3	36	38	1	14	1		15	16
2	4		4	6		2			2	2
	4		4	4	1	1	1		2	3
	5	1	6	6		4	4		8	8
	8		8	8	1	3	1	1	5	6

International classification No.
60
61
63b
64
66b
66c
69
74e
74g
67
68d
68h
68i
75r
76a
76b
86d
86e
86i
87a
100a
100b
100e
77
78

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
63b	Spinal cord, diseases of (others).						
64	Apoplexy						
66b	Paraplegia						
66c	Paralysis without specified cause (others).						
69	Epilepsy						
74e	Neuro-circulatory asthenia (disordered action of the heart).						
74g	Nervous system, other diseases of.						1
	VI. MENTAL ALIENATION.						
67	General paralysis of the insane.						
68d	Dementia præcox						
68h	Psychosis, manic depressive.						
68i	Psychosis (others)						
	VII. EYES AND THEIR ANNEXA, DISEASES OF.						
75r	Eyes and annexa, diseases of.						
	VIII. EAR, DISEASES OF.						
76a	Otitis media					1	
76b	Mastoiditis						
	IX. NASAL FOSSÆ, DISEASES OF.						
86d	Turbinate hypertrophy						
86e	Sinusitis (all)						
86i	Nasal fossæ, other diseases of.						
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal						
100a	Tonsillitis, acute	1					
100b	Tonsillitis, chronic						
100e	Pharynx, other diseases of						
	XI. CIRCULATORY SYSTEM, DISEASES OF.						
77	Pericarditis						
78	Endocarditis, acute						

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No. strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White	Color not stated.	Total.	White.	Colored.	Total.				
	1	1							60
									61
									63b
									64
									66b
			2		2			1	66c
									69
									74e
			1		1				74g
									67
									68d
									68h
									68i
			1		1				75r
			1		1				76a
									76b
									86d
									86e
									86i
									87a
									100a
									100b
									100e
									77
									78

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification number.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,479	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total. officers.	Total enlisted men, American troops.				Total. native troops.
					White.	Colored.	Color not stated.	Total.	
	XI. CIRCULATORY SYSTEM, DISEASES OF—contd.								
79a	Valvular diseases of the heart.	47	47	3	29	10	5	44	
	(1) Aortic insufficiency.	9	9	3	3	3		6	
	(2) Aortic stenosis	2	2		2			2	
	(3) Mitral insufficiency.	18	18		9	4	5	18	
	(4) Mitral stenosis	9	9		7	2		9	
	(5) Combined lesions, mitral aortic.	9	9		8	1		9	
79b	Cardiac hypertrophy	2	2		2			2	
79c	Cardiac dilatation	23	22	4	13	4	1	18	1
79d	Myocarditis and myocardial insufficiency.	19	19	5	9	5		14	
79e	Heart, other organic diseases of.	28	26		21	3	2	26	2
80	Angina pectoris	6	6	2	3	1		4	
81a	Aneurisms	2	2	1	1			1	
81b	Arterial sclerosis and hypertension.	6	6	4	1		1	2	
81c	Aortitis	1	1		1			1	
81d	Arteries, other diseases of	2	2	1	1			1	
82	Embolism and thrombosis	16	16	2	12	2		14	
84a	Status lymphaticus	3	3		2	1		3	
84b	Lymphatic system, other diseases of.	6	6		1	4	1	6	
85e	Heart block	4	3	1	2			2	1
85g	Hemorrhage	3	3		3			3	
85h	Circulatory system, other diseases of.	2	2		2			2	
	XII. RESPIRATORY SYSTEM, DISEASES OF.								
91	Pneumonia, broncho	1,382	1,381	12	1,064	164	141	1,369	1
92a	Pneumonia, lobar	1,027	1,018	40	684	236	58	978	9
92b	Pneumonia, unclassified	93	93	24	10	1	58	69	
93a	Pleurisy, suppurative	54	54	1	40	8	5	53	
93b	Pleurisy, serofibrinous	6	6	4	1	1		2	
93c	Pleura, other diseases of	5	5		4	1		5	
96	Asthma	11	11	2	5	4		9	
98	Lungs, other diseases of	11	11		8	3		11	
	XIII. DIGESTIVE SYSTEM, DISEASES OF.								
99c	Mouth and adnexa, other diseases of.	5	5		3	2		5	
101	Esophagus, diseases of	1	1		1			1	
102a	Ulcer of the stomach	7	7		6	1		7	
102c	Stomach, other diseases of	4	4		4			4	
105a	Duodenal ulcer	8	8	2	4	2		6	
105b	Diarrhea	2	2		2			2	
105c	Enteritis and colitis	13	13		11	2		13	
108	Appendicitis (all)	118	118	11	87	16	4	107	
109a	Hernia	10	10	3	6	1		7	
109b	Intestinal obstruction	23	23		21		2	23	
110a	Fistula in ano	1	1		1			1	
110b	Intestines, other diseases of	6	6	1	5			5	

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification number.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
3	17	4	21	24		12	5	5	22	22	79a
3	2	1	3	6		1	2		3	3	(1)
	2		2	2							(2)
	6	1	7	7		3	2	5	10	10	(3)
	3	1	4	4		4	1		5	5	(4)
	4	1	5	5		4			4	4	(5)
						2			2	2	79b
3	3	2	5	8	1	6	2	1	9	10	79c
3	5	2	7	10	2	4	3		7	9	79d
	9	2	11	11		12	1	2	15	15	79e
1	3		3	4	1		1		1	2	80
	1		1	1	1					1	81a
2				2	2	1		1	2	4	81b
						1			1	1	81c
	1		1	1	1					1	81d
1	5	1	6	7	1	7	1		8	9	82
	1	1	2	2		1			1	1	84a
	1	3	4	4			1	1	2	2	84b
1	2		2	3							85e
	2		2	2		1			1	1	85g
	2		2	2							85h
12	305	46	351	363		729	114	141	984	984	91
9	178	66	244	253	31	472	165	58	695	726	92a
	1		1	1	24	9	1	58	68	92	92b
	22	4	26	26	1	18	4	5	27	28	93a
1				1	3	1	1		2	5	93b
	2	1	3	3		2			2	2	93c
1	3		3	4	1	2	4		6	7	96
	3	2	5	5		5	1		6	[illegible]	98
	1	1	2	2		2	1		3	3	99c
	1		1	1							101
	2	1	3	3		4			4	4	102a
						4			4	4	102c
1	1	1	2	3	1	3	1		4	5	105a
	1		1	1		1			1	1	105b
		1	1	1		10	1		11	11	105c
7	42	5	47	54	3	41	11	4	56	59	108
2	3	1	4	6	1	3			3	4	109b
	14		14	14		7		2	9	9	109a
	1		1	1							110a
	1		1	1	1	3			3	4	110b

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XI. CIRCULATORY SYSTEM, DISEASES OF—contd.						
79a	Valvular diseases of the heart.						
	(1) Aortic insufficiency.						
	(2) Aortic stenosis						
	(3) Mitral insufficiency.			1	1		
	(4) Mitral stenosis						
	(5) Combined lesions, mitral aortic.						
79b	Cardiac hypertrophy						
79c	Cardiac dilatation		1		1		
79d	Myocarditis and myocardial insufficiency.						
79e	Heart, other organic diseases of.						
80	Angina pectoris						
81a	Aneurisms						
81b	Arterial sclerosis and hypertension.						
81c	Aortitis						
81d	Arteries, other diseases of						
82	Embolism and thrombosis						
84a	Status lymphaticus						
84b	Lymphatic system, other diseases of.						
85e	Heart block						
85g	Hemorrhage						
85h	Circulatory system, other diseases of.						
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89–90	Bronchitis						
91	Pneumonia, broncho		1	2	3		
92a	Pneumonia, lobar		2		2	2	
92b	Pneumonia, unclassified						
93a	Pleurisy, suppurative						
93b	Pleurisy, serofibrinous						
93c	Pleura, other diseases of						
96	Asthma						
98	Lungs, other diseases of						
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99c	Mouth and adnexa, other diseases of.						
101	Esophagus, diseases of						
102a	Ulcer of the stomach						
102c	Stomach, other diseases of						
105a	Duodenal ulcer						
105b	Diarrhea						
105c	Enteritis and colitis						
108	Appendicitis (all)	1	1		1	1	1
109a	Hernia						
109b	Intestinal obstruction						
110a	Fistula in ano						
110b	Intestines, other diseases of						

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
									79a
									(1)
									(2)
									(3)
									(4)
									(5)
									79b
2		2	1		1	1			79c
									79d
						1		1	79e
									80
									81a
									81b
									81c
									81d
									82
									84a
									84b
						1			85e
									85g
									85h
									89–90
22		22	7	2	9	1			91
19		19	11	5	16	6	2	1	92a
									92b
									93a
									93b
									93c
									96
									98
									99c
									101
									102a
									102c
									105a
									105b
1		1							105c
1		1							108
									109a
									109b
									110a
1		1							110b

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification number.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,479	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XIII.—DIGESTIVE SYSTEM, DISEASES OF—contd.								
113	Cirrhosis of the liver	9	8		8			8	1
115a	Cholecystitis	10	10	3	7			7	
115b	Gall bladder and bile duct, other diseases of.	2	2		2			2	
115c	Liver, other diseases of	3	3		2	1		3	
117a	Peritonitis	14	13		8	2	3	13	1
117b	Peritoneal adhesions	2	2		2			2	
118a	Pancreatitis	3	3	1	2			2	
118c	Digestive system, other diseases of.	1	1		1			1	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NON-VENEREAL).								
119	Nephritis, acute	28	28	2	21	4	1	26	
120	Nephriris, chronic	88	88	9	60	14	5	79	
122d	Pyogenic infection of the kidneys.	6	6	1	5			5	
122e	Kidney and adnexa, other diseases of.	5	5		5			5	
123	Nephrolithiasis	3	3	1	2			2	
127e	Genito-urinary system, other diseases of (non-venereal).	1	1			1		1	
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.								
143a	Carbuncle	2	2	1	1			1	
143b	Furuncle	2	1		1			1	1
144a	Abscess	13	12	1	9	2		11	1
144b	Cellulitis	8	8		7		1	8	
145o	Skin and cellular tissue, other diseases of.	5	5		4	1		5	
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.								
146a	Osteomyelitis	3	3		2	1		3	
146c	Bones, other diseases of	2	2			2		2	
149h	Organs of locomotion, other diseases of.	1	1		1			1	
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.								
189	Not specified or ill-defined diseases.	24	24	2	17	4	1	22	
	Total for diseases	7,647	7,598	311	5,382	1,377	528	7,287	49

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.	
	5		5	5		3			3	3
2	2		2	4	1	5			5	6
	1		1	1		1			1	1
	1		1	1		1	1		2	2
	5		5	5		3	1	3	7	7
	2		2	2						
1	1		1	2		1			1	1
						1			1	1
	7	3	10	10	1	12	1	1	14	15
6	25	7	32	38	3	33	7	5	45	48
	5		5	5	1					1
	1		1	1		4			4	4
	2		2	2	1					1
		1	1	1						
					1	1			1	2
	1		1	1						
	4	1	5	5	1	2	1		3	4
	4		4	4		3		1	4	4
	2	1	3	3		1			1	1
	2		2	2			1		1	1
							2		2	2
	1		1	1						
	6	1	7	7	2	11	3	1	15	17
135	2,032	530	2,562	2,697	171	3,198	831	526	4,555	4,726

International classification number.
113
115a
115b
115c
117a
117b
118a
118c
119
120
122d
122e
123
127e
143a
143b
144a
144b
145o
146a
146c
149h
189

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White
	XIII.—DIGESTIVE SYSTEM, DISEASES OF—contd.						
113	Cirrhosis of the liver						
115a	Cholecystitis						
115b	Gall bladder and bile duct, other diseases of.						
115c	Liver, other diseases of						
117a	Peritonitis						
117b	Peritoneal adhesions						
118a	Pancreatitis						
118c	Digestive system, other diseases of.						
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NON-VENEREAL).						
119	Nephritis, acute	1					
120	Nephritis, chronic					1	1
122d	Pyogenic infection of the kidneys.						
122e	Kidney and annexa, other diseases of.						
123	Nephrolithiasis						
127e	Genitro-urinary system, other diseases of (non-venereal).						
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.						
143a	Carbuncle						
143b	Furuncle						
144a	Abscess						2
144b	Cellulitis						
145o	Skin and cellular tissue, other diseases of.						
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis						
146c	Bones, other diseases of						
149h	Organs of locomotion, other diseases of.						
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.						
189	Not specified or ill-defined diseases.						
	Total for diseases	5	14	4	18	7	7

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	
Other countries and not stated.			Transports.						
White.	Color not stated.	Total.	White.	Colored.	Total.	Philippine Scouts.	Hawaiians.	Porto Ricans.	
						1			113
									115a
									115b
									115c
				1	1	1			117a
									117b
									118a
									118c
2		2							119
									120
									122d
									122e
									123
									127e
									143a
							1		143b
1		1				1			144a
									144b
			1		1				145o
									146a
									146c
									149h
									189
75	2	77	49	12	61	32	8	9	

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.								
2	Burns	37	37	16	15	2	4	21	
5	Concussion (brain)	5	5	1	2		2	4	
6	Contusion	6	6		6			6	
7	Crushing	164	163	39	96	4	24	124	1
9	Dislocation of joint	5	5		3	1	1	5	
11	Drowning (except suicides)	95	95	4	79	5	7	91	
13	Eye and annexa, traumatisms.	5	5		3		2	5	
15	Fracture, simple	183	183	30	118	14	21	153	
16	Fracture, compound	216	216	33	140	13	30	183	
18	Gases deleterious, absorption of.	2	2		2			2	
20	Hemorrhage and results	10	9		6	2	1	9	1
21	Homicides	37	37	3	23	4	7	34	
22	Poisoning by food	5	4		3	1		4	1
23	Poisoning, other acute	31	31	4	24	2	1	27	
24	Secondary result of injury.	1	1		1			1	
25	Sprain of joint	3	3		3			3	
26	Strain	1	1		1			1	
27	Suicide	146	140	22	102	2	14	118	6
28	Synovitis, traumatic, cause undetermined.	1	1		1			1	
30	Wounds, multiple	94	93	7	48	7	31	86	1
31	Wounds, penetrating	103	103	4	64	17	18	99	
33	Wounds, perforating	53	53	5	30	9	9	48	
34	Wounds, others	40	40	2	29	3	6	38	
35	Traumatisms, others	104	104	10	76	4	14	94	
	Total for diseases	7,647	7,598	311	5,382	1,377	528	7,287	49
	Total for external causes.	1,347	1,337	180	875	90	192	1,157	10
	Grand total	8,994	8,935	491	6,257	1,467	720	8,444	59
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.								
1	Knife	14	14	2	10	2		12	
2	Pistol ball	146	143	15	91	24	13	128	3
3	Rifle ball	125	121	10	81	14	16	111	4
4	Shotgun	3	3		3			3	
5	Cutting and piercing instrument (other).	29	29	1	24	1	3	28	
6	Other military agents	100	100	10	55	7	28	90	
8	Air machines	123	123	82	39		2	41	
9	Automobiles	107	107	13	71	5	18	94	
10	Motorcycles	45	45	12	30	2	1	33	
11	Railroad accidents	163	163	2	106	7	48	161	
12	Street car accidents	18	18		16	2		18	
13	Other vehicles	77	77		61	4	12	77	
14	Animals	8	8		8			8	
15	Conflagrations	6	6	1	3		2	5	
16	Crushing	14	13		12	1		13	1
17	Electricity	12	12		10	2		12	
18	Fall	68	68	12	39	6	11	56	
19	Falling objects	5	5	1	3	1		4	

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						Office classification. No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
	Enlisted men.					Enlisted men.					
Officers.	White.	Colored.	Total.	Total officers and enlisted men.	Officers.	White.	Colored.	Color not stated.	Total.	Total officers and enlisted men.	
9	7		7	16	7	6	2	4	12	19	2
	2		2	2	1			2	2	3	5
	2		2	2		3			3	3	6
19	42	1	43	62	20	52	3	24	79	99	7
	1		1	1		2	1	1	4	4	9
4	47	3	50	54		21	2	7	30	30	11
	2		2	2		1		2	3	3	13
12	44	5	49	61	18	72	9	21	102	120	15
17	59	5	64	81	16	76	7	30	113	129	16
						2			2	2	18
	3	1	4	4		2	1	1	4	4	20
2	10	2	12	14	1	12	2	7	21	22	21
	1		1	1		2	1		3	3	22
2	14	2	16	18	2	7		1	8	10	23
	1		1	1							24
	2		2	2		1			1	1	25
						1			1	1	26
8	65	2	67	75	14	29		14	43	57	27
	1		1	1							28
3	6	2	8	11	4	39	5	31	75	79	30
	23	4	27	27	3	36	13	18	67	70	31
3	15	2	17	20	2	12	7	9	28	30	33
1	9	1	10	11	1	17	2	6	25	26	34
	35		35	35	9	41	4	14	59	68	35
135	2,032	530	2,562	2,697	171	3,198	831	526	4,555	4,726	
80	391	30	421	501	98	431	59	192	685	783	
215	2,423	560	2,983	3,198	269	3,632	890	718	5,240	5,509	
1	3		3	4	1	7	2		9	10	1
8	41	10	51	59	7	41	14	13	68	75	2
1	30	3	33	34	9	39	10	16	65	74	3
	1		1	1		1			1	1	4
1	9		9	10		13	1	3	17	17	5
2	19	3	22	24	8	34	4	28	66	74	6
44	32		32	76	36	6		2	8	44	8
7	26	1	27	34	6	42	4	18	64	70	9
1	13	2	15	16	11	17		1	18	29	10
	36	3	39	39	2	69	4	48	121	123	11
	12	1	13	13		4	1		5	5	12
	24	1	25	25		36	3	12	51	51	13
	5		5	5		3			3	3	14
1	3		3	4				2	2	2	15
	4		4	4		7	1		8	8	16
	3		3	3		7	2		9	9	17
5	13	4	17	22	7	24	2	11	37	44	18
	3	1	4	4	1					1	19

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
2	Burns						1
5	Concussion (brain)						
6	Contusion						
7	Crushing					1	
9	Dislocation of joint						
10	Dislocation, articular, cartilage of knee.						
11	Drowning (except suicides)		1		1	1	2
13	Eye and annexa, traumatisms.						
15	Fracture, simple		1		1	1	
16	Fracture, compound			1	1	1	1
18	Gases deleterious, absorption of.						
20	Hemorrhage and results					1	
21	Homicides						1
22	Poisoning by food						
23	Poisoning, other acute		2		2	1	
24	Secondary result of injury						
25	Sprain of joint						
26	Strain						
27	Suicide		2		2	1	2
28	Synovitis, traumatic, cause undetermined.						
30	Wounds, multiple		1		1		
31	Wounds, penetrating	1					1
33	Wounds, perforating						
34	Wounds, others		1		1	1	
35	Traumatisms, others	1					
	Total for diseases	5	14	4	18	7	7
	Total for external causes	2	8	1	9	8	8
	Grand total	7	22	5	27	15	15
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.						
1	Knife						
2	Pistol ball		2		2	1	2
3	Rifle ball		1	1	2	1	1
4	Shotgun						1
5	Cutting and piercing instruments (other).		1		1		
6	Other military agents						
8	Air machines	2					1
9	Automobiles					2	
10	Motorcycles						
11	Railroad accidents						
12	Street car accidents						
13	Other vehicles					1	
14	Animals						
15	Conflagrations						
16	Crushing		1		1		
17	Electricity						
18	Falls					1	
19	Falling objects						

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	Office classification No.
Other countries and not stated.			Transports.						
White.	Color not stated.	Total.	White.	Colored.	Total.	Philippine Scouts.	Hawaiians.	Porto Ricans.	
1		1							2
									5
1		1							6
1		1					1		7
									9
									10
6		6	1		1				11
									13
									15
3		3							16
									18
						1			20
									21
						1			22
									23
									24
									25
									26
3		3				1	1	4	27
									28
2		2						1	30
4		4							31
3		3							33
1		1							34
									35
75	2	77	49	12	61	32	8	9	
25		25	1		1	3	2	5	
100	2	102	50	12	62	35	10	14	
									1
4		4						3	2
5		9				1	1	2	3
									4
1		1							5
2		2							6
									8
1		1							9
									10
1		1							11
									12
									13
									14
									15
							1		16
									17
1		1							18
									19

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.								
21	Machinery	1	1		1			1	
22	Other industrial agents	22	22	1	12	4	5	21	
23	Excessive cold	1	1		1			1	
27	Stones	3	3			1	2	3	
28	Strangulation	18	18		18			18	
29	Jumping	2	2		2			2	
31	Fire, conflagrations excepted.	2	2		2			2	
32	Poison	11	11	1	9		1	10	
33	Athletic exercises	10	9		8	1		9	1
34	Drilling and marching	1	1		1			1	
35	Fighting (brawls)	5	5		4	1		5	
36	Other external agents	208	207	17	155	5	30	190	1
	Total	1,347	1,337	180	875	90	192	1,157	10

[1] The deaths given above are shown under the diagnosis.

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
	Enlisted men.					Enlisted men.					
Officers.	White.	Colored.	Total.	Total officers and enlisted men.	Officers.	White.	Colored.	Color not stated.	Total.	Total officers and enlisted men.	Office classification No.
						1			1	1	21
					1	12	4	5	21	22	22
	1		1	1							23
							1	2	3	3	27
	12		12	12		5			5	5	28
	1		1	1		1			1	1	29
	1		1	1		1			1	1	31
	8		8	8	1	1		1	2	3	32
	3		3	3		5	1		6	6	33
						1			1	1	34
	4	1	5	5							35
9	84		84	93	8	57	5	30	92	100	36
80	391	30	421	501	98	434	59	192	685	783	

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.			American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	Disease.	Officers, other countries.	Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.						
21	Machinery						
22	Other industrial agents						
23	Excessive cold						
26	Lightning						
27	Stones						
28	Strangulation						1
29	Jumping						
31	Fire, conflagration except.						
32	Poisons						
33	Athletic exercises						
34	Drilling and marching						
35	Fighting (brawls)						
36	Other external agents		3		3	2	2
	Total	2	8	1	9	8	8

The deaths shown above are shown under the diagnosis.

TABLE XVII.—*Deaths, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and notstated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
									21
									22
									23
									26
									27
									28
									29
									31
									32
						1			33
									34
									35
6		6	1		1	1			36
25		25	1		1	3	2	5	

TABLE XVIII.—*Deaths, United States Army, 1919.*

RATIOS PER 1,000.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).							
1	Typhoid fever	0.07	0.07	0.05	0.06	0.09	0.07	.....
4	Malarial fevers (all)	.01	.01	.....	.01	.01	.01	0.02
5	Smallpox	.01	.01	.....	.01	.01	.01	.....
6	Measles (all)	.05	.05	.....	.05	.03	.05	.....
7	Scarlet fever	.04	.04	.05	.05	.....	.04	.....
9	Diphtheria, and results	.04	.04	.04	.04	.....	.04	.....
10	Influenza (all)	1.76	1.78	1.40	1.72	1.28	1.80	.02
12	Asiatic cholera	.01	.00	.....	.00	.....	.00	.04
14	Dysentery (all)	.01	.01	.02	.01	.01	.01	.02
18	Erysipelas	.01	.01	.02	.01	.01	.01	.....
19g	Meningitis, cerebrospinal (epidemic)	.34	.34	.23	.29	.56	.35	.01
19h	Mumps	.02	.02	.02	.01	.05	.02	.01
19i	Paratyphoid A	.00	.00	.....	.00	.01	.00	.....
19j	Paratyphoid B	.00	.00	.....	.00	.....	.00	.....
19p	Epidemic diseases, others	.01	.01	.02	.00	.01	.01	.....
20a	Septicemia, general	.02	.02	.....	.02	.05	.03	.....
47	Acute articular rheumatism	.01	.01	.02	.01	.02	.01	.01
	II. TUBERCULOSIS.							
28a	Tuberculosis of lungs	1.24	1.25	.40	.81	5.20	1.30	.06
29	Acute miliary tuberculosis	.12	.12	.05	.06	.60	.12	.02
30–35	Tuberculosis, others	.14	.14	.04	.09	.58	.15	.02
	Tuberculosis (all)	1.50	1.50	.49	.97	6.39	1.56	.10
	III. VENEREAL DISEASES (ALL).							
37	Syphilis (all)	.03	.03	.04	.01	.14	.02	.01
37d	Syphilis, tertiary	.02	.02	.02	.01	.12	.02	.01
37e	Syphilis, unclassified	.00	.01	.02	.00	.02	.00	.....
38b	Gonococcus infection	.01	.01	.02	.00	.02	.01	.....
	Venereal (all)	.03	.03	.05	.02	.15	.03	.01
	IV. GENERAL DISEASES (OTHER).							
39–45	Cancer and other malignant tumors	.06	.06	.13	.05	.05	.05	.01
46	Tumors, benign	.01	.01	.02	.01	.01	.01	.....
48a	Arthritis	.01	.01	.....	.01	.....	.01	.....
50	Diabetes, mellitus	.02	.02	.02	.02	.04	.02	.....
51a	Exophthalmic goiter (hyperthyroidism)	.00	.00	.....	.00	.....	.00	.....
52a	Addison's disease	.00	.00	.....	.00	.....	.00	.....
53a	Leukemia	.01	.01	.02	.01	.....	.01	.01
53b	Hodgkin's disease	.00	.00	.02	.00	.....	.00	.....
54	Anemia, chlorosis	.01	.01	.02	.00	.....	.01	.....
55c	Purpura	.00	.00	.....	.00	.01	.00	.....
55e	General diseases, others	.01	.01	.....	.01	.01	.01	.....
56a	Alcoholism (acute or chronic)	.01	.01	.02	.01	.....	.01	.....
56b	Drug addiction	.00	.00	.....	.....	.01	.00	.....
57–59	Poisoning, chronic	.00	.00	.....	.....	.01	.00	.....
	V. NERVOUS SYSTEM, DISEASES OF (ALL).							
60	Encephalitis	.01	.01	.02	.01	.01	.01	.....
61	Meningitis, simple	.06	.06	.02	.04	.15	.06	.....
63b	Spinal cord, diseases of (others)	.01	.01	.....	.01	.02	.01	.....
64	Apoplexy	.01	.01	.05	.00	.05	.01	.....
66b	Paraplegia	.00	.00	.....	.....	.01	.00	.....

TABLE XVIII.—*Deaths, United States Army, 1919.*

RATIOS PER 1,000.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).				
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.08	0.02	0.11	0.03	0.03	0.04	0.10	0.09	0.11	0.11	1
.....	.01	.04	.01	.01	.....	.00	.....	.00	.00	4
.....	.00	.....	.00	.00	.....	.01	.....	.01	.01	5
.....	.13	.11	.12	.11	.....	.02	.....	.02	.02	6
.04	.09	.....	.08	.08	.08	.03	.....	.03	.03	7
.04	.05	.....	.05	.05	.04	.04	.....	.04	.04	9
.90	1.90	1.11	1.83	1.75	2.14	1.81	1.52	2.00	2.00	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
.04	.00	.04	.01	.01	.....	.01	.....	.01	.01	14
.04	.02	.04	.02	.02	.....	.00	.....	.00	.00	18
.15	.21	.52	.24	.23	.36	.37	.63	.45	.44	19g
.....	.03	.11	.03	.03	.04	.01	.03	.01	.01	19h
.....	.....	.....	.....	.....	.....	.00	.02	.01	.01	19i
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	19j
.04	.01	.....	.01	.01	.....	.00	.02	.01	.01	19k
.....	.04	.11	.05	.04	.....	.01	.03	.02	.02	20a
.04	.02	.07	.02	.02	.....	.00	.....	.00	.00	47
.56	1.27	8.99	1.95	1.84	.24	.67	4.15	1.12	1.08	28a
.04	.06	.52	.10	.10	.08	.06	.70	.14	.14	29
.08	.09	.67	.14	.14	.....	.10	.61	.17	.16	30–35
.68	1.43	10.17	2.20	2.07	.32	.83	5.46	1.43	1.38	
.08	.02	.26	.04	.04	.....	.01	.10	.02	.02	37
.04	.01	.22	.03	.03	.....	.01	.08	.02	.02	37d
.04	.00	.04	.01	.01	.....	.00	.02	.00	.00	37e
.....	.01	.04	.01	.01	.04	.00	.....	.00	.01	38b
.08	.03	.30	.05	.05	.04	.01	.10	.02	.02	
.19	.10	.15	.10	.11	.04	.03	.....	.03	.03	39–45
.04	.02	.....	.02	.02	.....	.00	.02	.01	.01	46
.....	.01	.....	.01	.01	.....	.01	.....	.01	.01	48a
.04	.04	.07	.04	.04	.....	.01	.03	.02	.02	50
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	51a
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	52a
.04	.01	.....	.01	.01	.....	.01	.....	.01	.01	53a
.04	.....	.....	.....	.00	.....	.01	.....	.01	.01	53b
.04	.01	.....	.01	.01	.....	.01	.....	.01	.01	54
.....	.....	.....	.....	.....	.....	.00	.02	.01	.01	55c
.....	.01	.04	.01	.01	.....	.00	.....	.00	.00	55e
.....	.02	.....	.02	.02	.04	.00	.....	.00	.01	56a
.....	.....	.04	.00	.01	.....	.....	.....	.....	.....	56b
.....	.....	.....	.....	.....	.....	.....	.02	.00	.00	57–59
.....	.02	.....	.02	.02	.01	.01	.02	.01	.01	60
.....	.04	.26	.06	.05	.04	.06	.12	.08	.08	61
.....	.01	.04	.02	.01	.....	.00	.02	.00	.00	63b
.08	.....	.11	.01	.01	.04	.01	.03	.01	.01	64
.....	.....	.....	.....	.....	.....	.....	.02	.00	.00	66b

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification. No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
4	Malarial fevers (all)		0.26		0.18		0.20
5	Smallpox		.26		.18		
6	Measles (all)						
7	Scarlet fever						
9	Diphtheria and results						
10	Influenza (all)	0.25	.26		.18	0.32	
12	Asiatic cholera		.52		.37		
14	Dysentery (all)		1.03		.74		
18	Erisipelas						
19g	Meningitis, cerebrospinal (epidemic).						
19h	Mumps						
19i	Paratyphoid A						
19j	Paratyphoid B						
19p	Epidemic diseases, others						
20a	Septicemia, general						
47	Acute articular rheumatism						
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs	.25				.32	.20
29	Acute miliary tuberculosis						
30–35	Tuberculosis, others						
	Tuberculosis (all)	.25				.32	.20
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)						
37d	Syphilis, tertiary						
37e	Syphilis, unclassified						
38b	Gonococcus infection						
	Venereal (all)						
	IV. GENERAL DISEASES (OTHER).						
39–45	Cancer and other malignant tumors.			.65	.18		
46	Tumors, benign						
48a	Arthritis						
50	Diabetes, mellitus						
51a	Exophthalmic goiter (hyperthyroidism).						
52a	Addison's disease						
53a	Leukemia						
53b	Hodgkin's disease						
54	Anemia, chlorosis						
55c	Purpura						
55e	General diseases, others						
56a	Alcoholism (acute or chronic)						
56b	Drug addiction						
57–59	Poisoning, chronic						
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
63b	Spinal cord, diseases of (others)						
64	Apoplexy						
66b	Paraplegia						

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
		0.02		0.02				1
					0.12		0.48	4
0.30	0.30		0.16	.02				5
.10	.10							6
								7
								9
1.49	1.49	.32	.16	.30		0.96		10
					.60			12
					.24			14
								18
.10	.10	.08	.16	.08			.48	19g
					.12			19h
								19i
								19j
								19p
								20a
					.12			47
.30	.40				.48	1.44	.48	28a
.10	.10		.16	.02	.24			29
.10	.10	.02		.02	.24		.48	30–35
.50	.60	.02	.16	.03	.95	1.44	.96	
							.48	37
							.48	37d
								37e
								38b
							.48	
		.02		.02	.12			34–45
								46
								48a
								50
								51a
								52a
							.48	53a
								53b
								54
								55c
.10	.10							55e
								56a
								56b
								57–59
	.10							60
								61
								63b
								64
								66b

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—continued.							
66c	Paralysis without specified cause (others).	0.00	0.00	.....	0.00	.....	0.00	0.01
69	Epilepsy	.00	.00	.....	.00	.....	.00	.....
74e	Neuro-circulatory asthenia (disordered action of the heart).	.00	.00	.....	.00	.....	.00	.....
74g	Nervous system, other diseases of	.03	.03	0.02	.01	0.01	.03	.....
	VI. MENTAL ALIENATION.							
67	General paralysis of the insane	.01	.01	.05	.01	.04	.01	.....
68d	Dementia præcox	.00	00	.....	.00	.01	.00	.....
68h	Psychosis, manic depressive	.00	.00	.....	.00	.02	.00	.....
68i	Psychosis (others)	.01	.01	.....	.05	.01	.01	.....
	VII. EYES AND THEIR ANNEXA, DISEASES OF.							
75r	Eyes and annexa, diseases of	.01	.01	.....	.01	.....	.01	.....
	VIII. EAR, DISEASES OF.							
76a	Otitis media	.05	.05	.02	.06	.02	.06	.....
76b	Mastoiditis	.02	.02	.....	.03	.01	.03	.....
	IX. NASAL FOSSÆ, DISEASES OF.							
86d	Turbinate hypertrophy	.00	.00	.....	.00	.01	.00	.....
86e	Sinusitis (all)	.01	.01	.02	.01	.01	.01	.....
86i	Nasal fossæ, other diseases of	.00	.00	.02	.....	.....	.....	.....
	X. THROAT, DISEASES OF.							
87a	Laryngitis, acute catarrhal	.00	.00	.....	.00	.....	.00	.....
100a	Tonsillitis, acute	.05	.06	.07	.06	.04	.05	.....
100b	Tonsillitis, chronic	.01	01	.04	.01	.....	.01	.....
100e	Pharynx, other diseases of	.01	.01	.02	.01	.01	.01	.....
	XI. CIRCULATORY SYSTEM, DISEASES OF.							
77	Pericarditis	.01	.01	.....	.01	.05	.01	.....
78	Endocarditis, acute	.01	.01	.02	.01	.01	.01	.....
79a	Valvular diseases of the heart	.05	.05	.05	.03	.11	.05	.....
	(1) Aortic insufficiency	.01	.01	.05	.00	.03	.01	.....
	(2) Aortic stenosis	.00	.00	.....	.00	.....	.00	.....
	(3) Mitral insufficiency	.02	.02	.....	.01	.01	.02	.....
	(4) Mitral stenosis	.01	.01	.....	.01	.02	.01	.....
	(5) Combined lesions, mitral aortic.	.01	.01	.....	.01	.01	.01	.....
79b	Cardiac hypertrophy	.00	.00	.....	.00	.....	.00	.....
79c	Cardiac dilatation	.02	.02	.07	.02	.04	.02	.01
79d	Myocarditis and myocardial insufficiency.	.02	.02	.09	.01	.05	.01	.....
79e	Heart, other organic diseases of	.03	.03	.....	.02	.03	.03	.02
80	Angina pectoris	.01	.01	.04	.00	.01	.00	.....
81a	Aneurisms	.00	00	.02	.00	.....	.00	.....
81b	Arterial sclerosis and hypertension	.01	.01	.07	.00	.....	.00	.....
81c	Aortitis	.00	.00	.....	.00	.....	.00	.....
81d	Arteries, other diseases of	.00	.00	.02	.00	.....	.00	.....
82	Embolism and thrombosis	.02	.02	.04	.01	.02	.01	.....
84a	Status lymphaticus	.00	.00	.....	.00	.01	.00	.....

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
										66c
	0.00		0.00			0.00		0.00	0.00	69
	.00		.00					.00	.00	74e
	.04	0.04	.04	0.04	0.04	.02		.02	.02	74g
0.11	.01	.04	.01	.02		.01	0.05	.01	.01	67
	.01	.04	.01	.01						68d
	.01		.01	.01			.03	.00	00	68h
	.00		.00	.00		.01	.02	.01	.01	68i
	.02		.02	.01						75r
.04	.08	.04	.08	.07		.05	.02	.05	.05	76a
	.05		.05	.04		.01	.02	.02	.02	76b
						.00	.02	.00	.00	86d
.04	.02	.04	.02	.02		.00		.00	00	86e
.04				.00						86i
	.00		.00	.00						87a
.08	.12	.11	.12	.11	.04	.03	.02	.03	.03	100a
.08	.01		.01	.02		.00		.00	.00	100b
	.01		.01	.01	.04	.00	.02	.00	.01	100c
	.02	.04	.02	.02		.01	07	.01	.01	77
	.03		.03	.02	.04	.01	.02	.01	.01	78
.11	.06	.15	.07	.07		.02	.08	.04	.04	79a
.11	.01	.04	.01	.02		.00	.03	.01	.01	(1)
	.01		.01	.01						(2)
	.02	.04	.02	.02		.01	.03	.02	.02	(3)
	.01	.04	.01	.01		.01	.02	.01	.01	(4)
	.01	.04	.02	.01		.01		.01	01	(5)
						.01		.00	.00	79b
.11	.01	.07	.02	.02	.04	.01	.03	.02	.02	79c
.11	.02	.07	.02	.03	.08	.01	.05	.01	.02	79d
	.03	.07	.04	.03		.02	.02	.03	.03	79e
.04	.01		.01	.01	.04		.02	.00	.00	80
	.00		.00	.00	.04				.00	81a
.08				.01	.08	.00		.00	.01	81b
						.00		.00	.00	81c
					.04				.00	81d
	.00		.00	.00						
.04	.02	.04	.02	.02	.04	.01	.02	.01	.02	82
	.00	.04	.01	.01		.00		.00	00	84a

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification. No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—continued.						
66c	Paralysis without specified cause (others).						
69	Epilepsy						
74e	Neuro-circulatory asthenia (disordered action of the heart).						
74g	Nervous system, other diseases of						0.20
	VI. MENTAL ALIENATION.						
67	General paralysis of the insane						
68d	Dementia præcox						
68h	Psychosis, manic depressive						
68i	Psychosis (others)						
	VII. EYES AND THEIR ANNEXA, DISEASES OF.						
75r	Eyes and annexa, diseases of						
	VIII. EAR, DISEASES OF.						
76a	Otitis media					0.32	
76b	Mastoiditis						
	IX. NASAL FOSSÆ, DISEASES OF.						
86d	Turbinate hypertrophy						
86e	Sinusitis (all)						
86i	Nasal fosæ, other diseases of						
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal						
100a	Tonsilitis, acute	0.25					
100b	Tonsilitis, chronic						
100c	Pharynx, other diseases of						
	XI. CIRCULATORY SYSTEM, DISEASES OF.						
77	Pericarditis						
78	Endocarditis, acute						
79a	Valvular diseases of the heart						
	(1) Aortic insufficiency						
	(2) Aortic stenosis						
	(3) Mitral insufficiency			0.65	0.18		
	(4) Mitral stenosis						
	(5) Combined lesions, mitral aortic.						
79b	Cardiac hypertrophy						
79c	Cardiac dilatation		0.26		.18		
79d	Myocarditis and myocardial insufficiency.						
79e	Heart, other organic diseases of						
80	Angina pectoris						
81a	Aneurisms						
81b	Arterial sclerosis and hypertension						
81c	Aortitis						
81d	Arteries, other diseases of						
82	Embolism and thrombosis						
84a	Status lymphaticus						

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men.)					Native troops (enlisted men.)			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
		0.04		0.03			0.48	66c
								69
								74e
		.02		.02				74g
								67
								68d
								68h
								68i
		.02		.02				75r
		.02		.02				76a
								76b
								86d
								86e
								86i
								87a
								100a
								100b
								100e
								77
								78
								79a
								(1)
								(2)
								(3)
								(4)
								(5)
								79b
0.20	0.20	.02		.02	0.12		.48	79c
								79d
					.12			79e
								80
								81a
								81b
								81c
								81d
								82
								84a

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XI. CIRCULATORY SYSTEM, DISEASES OF—continued.							
84b	Lymphatic system, other diseases of.	0.01	0.01	.....	0.00	0.04	0.01	.....
85e	Heart block	.00	.00	.02	.00	.....	.00	0.01
85g	Hemorrhage	.00	.00	.....	.00	.....	.00	.....
85h	Circulatory system, other diseases of.	.00	.00	.....	.00	.....	.00	.....
	XII. RESPIRATORY SYSTEM, DISEASES OF.							
89–90	Bronchitis	.....	.....	.....	.....	.....	.....	.....
91	Pneumonia, broncho	1.37	1.39	.22	1.25	1.75	1.46	.01
92a	Pneumonia, lobar	1.02	1.03	.72	.83	2.53	1.04	.07
92d	Pneumonia, unclassified	.09	.09	.43	.01	.01	.07	.....
93a	Pleurisy, suppurative	.05	.05	.02	.05	.09	.06	.....
93b	Pleurisy, serofibrinous	.01	.01	.07	.00	.01	.00	.....
93c	Pleura, other diseases of	.00	.01	.....	.00	.01	.01	.....
96	Asthma	.01	.01	.04	.01	.04	.01	.....
98	Lungs, other diseases of	.01	.01	.....	.01	.03	.01	.....
	XIII. DIGESTIVE SYSTEM, DISEASES OF.							
99c	Mouth and adnexa, other diseases of.	.00	.01	.....	.00	.02	.01	.....
101	Esophagus, diseases of	.00	.00	.....	.00	.....	.00	.....
102a	Ulcer of the stomach	.01	.01	.....	.01	.01	.01	.....
102c	Stomach, other diseases of	.00	.00	.....	.00	.....	.00	.....
105a	Duodenal ulcer	.01	.01	.04	.00	.02	.01	.....
105b	Diarrhea	.00	.00	.....	.00	.....	.00	.....
105c	Enteritis and colitis	.01	.01	.....	.01	.02	.01	.....
108	Appendicitis (all)	.12	.12	.20	.10	.17	.11	.....
109a	Hernia	.01	.01	.05	.01	.01	.01	.....
109b	Intestinal obstruction	.02	.02	.....	.02	.....	.02	.....
110a	Fistula in ano	.00	.00	.....	.00	.....	.00	.....
110b	Intestines, other diseases of	.01	.01	.02	.01	.....	.01	.....
113	Cirrhosis of the liver	.01	.01	.....	.01	.....	.01	.01
115a	Cholecystitis	.01	.01	.05	.01	.....	.01	.....
115b	Gall bladder and bile duct, other diseases of.	.00	.00	.....	.00	.....	.00	.....
115c	Liver, other diseases of	.00	.00	.....	.00	.01	.00	.....
117a	Peritonitis	.01	.01	.....	.01	.02	.01	.01
117b	Peritoneal adhesions	.00	.00	.....	.00	.....	.00	.....
118a	Pancreatitis	.00	.00	.02	.00	.....	.00	.....
118c	Digestive system, other diseases of	.00	.00	.....	.00	.....	.00	.....
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).							
119	Nephritis, acute	.03	.03	.04	.02	.04	.03	.....
120	Nephritis, chronic	.09	.09	.16	.07	.15	.08	.....
122d	Pyogenic infection of the kidneys	.01	.01	.02	.01	.....	.01	.....
122c	Kidney and adnexa, other diseases of.	.01	.01	.....	.05	.....	.00	.....
123	Nephrolithiasis	.00	.00	.02	.00	.....	.00	.....
127e	Genito-urinary system, other diseases of (nonvenereal).	.00	.00	.....	.....	.01	.00	.....

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
	0.00	0.11	0.01	0.01			0.02	0.00	0.00	84b
.04	.01		.01	.01						85e
	.01		.01	.01		00		.00	.00	85g
	.01		.01	.01						85h
										89-90
.45	1.09	1.70	1.14	1.09		1.49	1.94	1.80	1.72	91
.34	.64	2.44	.79	.76	1.25	.97	2.82	1.27	1.27	92a
	.00		.00	.00	.97	.02	.02	.12	.16	92d
	.08	.15	.08	.08	04	.04	.07	.05	.05	93a
.04				.00	.12	.00	.02		.01	93b
	.01	.04	.01	.01		.00		.00	.00	93c
.04	.01		.01	.01	.04	.00	.07	.01	.01	96
	.01	.07	.02	.04		.01	.02	.01	.01	98
	.00	.04	.01			.00	.02	.01	.01	99c
	.00		.00	.01						101
	.01	.04	.01	.00		.01		.01	.01	102a
						.01		.01	.01	102c
.04	.00	.04	.01	.01	.04	.01	.02	.01	.01	105a
	.00		.00	.00		.00		.00	.00	105b
		.04	.00	.00		.02	.02	.02	.02	105c
.26	.16	.19	.15	.16	.12	.08	.19	.10	.10	108
.08	.01	.04	.01	.02	.04	.01		.01	.01	109a
	.05		.05	.04		.01		.02	.02	109b
	.00		.00	.00						110a
	.00		.00	.00	.04	.01		.01	.01	110b
	.02		.02	.01		.01		.01	.01	113
.08	.01		.01	.01	.04	.01		.01	.01	115a
	.00		.00	.00		.00		.00	.00	115b
	.00		.00	.00		.00	.02	.00	.00	115c
	.02		.02	.01		.01	.02	.01	.01	117a
	.01		.01	.01						117b
.04	.00		.00	.01		.00		.00	.00	118a
						.00		.00	.00	118c
	.03	.11	.03	.03	.04	.02	.02	.03	.03	119
.19	.09	.26	.10	.11	.12	.07	.12	.08	.08	120
	.02		.02	.01	.04				.00	122d
	.00		.01	.00		.01		.01	.01	122e
	.01		.01	.01	.01				.00	123
		.04	.00	.00						127e

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification. No.	Disease.	American troops in other countries (enlisted men).					
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
		Officers, other countries.	Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XI. CIRCULATORY SYSTEM, DISEASES OF—continued.						
84b	Lymphatic system, other diseases of.						
85e	Heart block						
85g	Hemorrhage						
85h	Circulatory system, other diseases of.						
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89-90	Bronchitis						
91	Pneumonia, broncho		0.26	1.30	0.55		
92a	Pneumonia, lobar		.52		.37	0.64	
92d	Pneumonia, unclassified						
93a	Pleurisy, suppurative						
93b	Pleurisy, serofibrinous						
93c	Pleura, other diseases of						
96	Asthma						
98	Lungs, other diseases of						
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99c	Mouth and annexa, other diseases of						
101	Esophagus, diseases of						
102a	Ulcer of the stomach						
102c	Stomach, other diseases of						
105a	Duodenal ulcer						
105b	Diarrhea						
105c	Enteritis and colitis						
108	Appendicitis (all)	0.25	.26		.18	.32	0.20
109a	Hernia						
109b	Intestinal obstruction						
110a	Fistula in ano						
110b	Intestines, other diseases of						
113	Cirrhosis of the liver						
115a	Cholecystitis						
115b	Gall bladder and bile duct, other diseases of.						
115c	Liver, other diseases of						
117a	Peritonitis						
117b	Peritoneal adhesions						
118a	Pancreatitis						
118c	Digestive system, other diseases of						
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).						
119	Nephritis, acute	.25					
121	Nephritis, chronic					.32	.20
122d	Pyogenic infection of the kidneys						
122e	Kidney and annexa, other diseases of.						
123	Nephrolithiasis						
127e	Genito-urinary system, other diseases of (nonvenereal).						

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men.)					Native troops (enlisted men.)			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
								84b
					0.12			85c
								85g
								85h
								89-90
2.18	2.18	0.13	0.32	0.15	.12			91
1.88	1.88	.21	.79	.27	.72	0.96	0.48	92a
								92d
								93a
								93b
								93c
								96
								98
								99c
								101
								102a
								102c
								105a
								105b
.10	.10							105c
.10	.10							108
								109a
								109b
								110a
.10	.10							110b
					.12			113
								115a
								115b
								115c
			.16	.02	.12			117a
								117b
								118a
								118c
.20	.20							119
								120
								122d
								122e
								123
								127e

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.							
143a	Carbuncle	0.00	0.00	0.02	0.00	.....	0.00	.....
143b	Furuncle	.00	.00	.....	.00	.....	.00	0.01
144a	Abscess	.01	.01	.02	.01	0.02	.01	.01
144b	Cellulitis	.01	.01	.....	.01	.....	.01	.....
145o	Skin and cellular tissue, other diseases of.	.01	.01	.....	.04	.01	.01	.....
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.							
149a	Osteomyelitis	.00	.00	.....	.00	.01	.00	.....
149c	Bones, other diseases of	.00	.00	.....	.....	.02	.00	.....
149h	Organs of locomotion, other diseases of.	.00	.00	.....	.00	.....	.00	.....
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.							
189	Not specified or ill-defined diseases.	.02	.02	.04	.02	.04	.02	.....
	Total for diseases	7.61	7.66	5.60	6.38	14.73	7.78	.39
Office classification No.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.							
2	Burns	.04	.04	.29	.02	.02	.02	.....
5	Concussion (brain)	.00	.01	.02	.00	.....	.00	.....
6	Contusion	.01	.01	.....	.01	.....	.01	.....
7	Crushing	.16	.16	.70	.11	.04	.13	.08
9	Dislocation of joint	.00	.01	.....	.00	.01	.01	.....
10	Dislocation, articular cartilage of knee.	.....	.....	.....	.....	.....	.....	.....
11	Drowning (except suicides)	.09	.10	.07	.09	.05	.10	.....
13	Eye and adnexa, traumatisms	.00	.01	.....	.00	.....	.01	.....
15	Fracture, simple	.18	.18	.54	.14	.15	.16	.....
16	Fracture, compound	.21	.22	.59	.17	.14	.20	.....
18	Gases, deleterious, absorption of	.00	.00	.....	.00	.....	.00	.....
20	Hemorrhage and results	.01	.01	.....	.01	.02	.01	.08
21	Homicides	.04	.04	.05	.03	.04	.04	.....
22	Poisoning by food	.00	.00	.....	.00	.01	.00	.08
23	Poisoning, other acute	.03	.03	.07	.03	.02	.03	.....
24	Secondary result of injury	.00	.00	.....	.00	.....	.00	.....
25	Sprain of joint	.00	.00	.....	.00	.....	.00	.....
26	Strain	.00	.00	.....	.00	.....	.00	.....
27	Suicide	.15	.14	.40	.12	.02	.13	.48
28	Synovitis, traumatic, cause undetermined.	.00	.00	.....	.00	.....	.00	.....
30	Wounds, multiple	.09	.09	.13	.06	.07	.09	.08
31	Wounds, penetrating	.10	.10	.07	.08	.18	.11	.....
33	Wounds, perforating	.05	.05	.09	.04	.10	.05	.....
34	Wounds, other	.04	.04	.04	.03	.03	.04	.....
35	Traumatisms, others	.10	.10	.18	.09	.04	.10	.....
	Total for diseases	7.61	7.66	5.60	6.38	14.73	7.78	.39
	Total for external causes	1.34	1.35	3.24	1.04	.96	1.24	.80
	Grand total	8.95	9.01	8.84	7.42	15.69	9.01	1.19

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
					0.04	0.00		0.00	0.00	143a
	0.00		0.00	0.00						143b
	.01	0.04	.02	.01	.04	.00	0.02	.01	.01	144a
	.01		.01	.01		.01		.01	.01	144b
	.01	.04	.01	.01		.00		.00	.00	145o
	.01		.01	.01			.02	.00	.00	146a
							.03	.01	.00	146c
	.00		.00	.00						149h
	.02	.04	.02	.02	.08	.02	.05	.03	.03	189
5.06	7.26	19.60	8.35	8.08	6.89	6.55	14.18	8.33	8.27	
										Office classification No.
.34	.03		.02		.28	.01	.03	.02	.03	2
	.01		.01	.01	.04			.00	.01	5
	.01		.01	.01		.01		.01	.01	6
.71	.15	.04	.14	.19	.81	.11	.05	.14	.17	7
	.00		.00	.00		.00	.02	.01	.01	9
										10
.15	.17	.11	.16	.16		.04	.03	.05	.05	11
	.01		.01	.01		.00		.01	.01	13
.45	.16	.18	.16	.18	.73	.15	.15	.19	.21	15
.64	.21	.18	.21	.24	.64	.16	.12	.21	.23	16
						.00		.00	.00	18
	.01	.04	.01	.01		.00	.02	.01	.01	20
.07	.04	.07	.04	.04	.04	.02	.03	.04	.04	21
	.00		.00	.00		.00	.02	.01	.01	22
.07	.05	.07	.05	.05	.08	.01		.01	.02	23
	.00		.00	.00						24
	.01		.01	.01		.00		.00	.00	25
						.00		.00	.00	26
.30	.23	.07	.22	.22	.56	.06		.08	.10	27
	.00		.00	.00						28
.11	.02	.07	.03	.03	.16	.08	.09	.14	.14	30
	.08	.15	.09	.08	.12	.07	.22	.12	.12	31
.11	.05	.07	.05	.06	.08	.02	.12	.05	.07	33
.04	.03	.04	.03	.03	.04	.03	.03	.05	.05	34
	.13		.11	.10	.36	.08	.07	.11	.12	35
5.06	7.26	19.60	8.35	8.08	6.89	6.55	14.18	8.33	8.27	
3.00	1.40	1.11	1.37	1.50	3.95	.89	1.01	1.25	1.37	
8.06	8.66	20.71	9.72	9.58	10.84	7.44	15.19	9.58	9.64	

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification. No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.						
143a	Carbuncle						
143b	Furuncle						
144a	Abscess						0.40
144b	Cellulitis						
145o	Skin and cellular tissue, other diseases of.						
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis						
146c	Bones, other diseases of						
149h	Organs of locomotion, other diseases of.						
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.						
189	Not specified or ill-defined diseases						
	Total for diseases	1.23	3.61	2.60	3.32	2.23	1.40
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
2	Burns						.20
5	Concussion (brain)						
6	Contusion						
7	Crushing					.32	
9	Dislocation of joint						
10	Dislocation, articular, cartilage of knee.						
11	Drowning (except suicides)		.26		.18	.32	.40
13	Eye and annexa, traumatisms						
15	Fracture, simple		.26		.18	.32	
16	Fracture, compound			.65	.18	.32	.20
18	Gases deleterious, absorption of						
20	Hemorrhage and results					.32	
21	Homicides						.20
22	Poisoning by food						
23	Poisoning, other acute		.52		.37	.32	
24	Secondary result of injury						
25	Sprain of joint						
26	Strain						
27	Suicide		.52		.37	.32	.40
28	Synovitis, traumatic, cause undetermined.						
30	Wounds, multiple		.26		.18		
31	Wounds, penetrating	.25					.20
33	Wounds, perforating						
34	Wounds, others	.25	.26		.18	.32	
35	Traumatisms, others						
	Total for diseases	1.23	3.61	2.60	3.32	2.23	1.40
	Total for external causes	.49	2.06	.65	1.66	2.55	1.60
	Grand total	1.72	5.67	3.25	4.98	4.78	3.00

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men.)					Native troops (enlisted men.)			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
								143a
						0.48		143b
0.10	0.10				0.12			144a
								144b
		0.02		0.02				145o
								146a
								146c
								149h
								189
7.44	7.64	.92	1.91	1.02	3.81	3.84	4.30	
								Office classification.
.10	.10							2
								5
.10	.10							6
.10	.10					.48		7
								9
								10
.60	.60	.02		.02				11
								13
								15
.30	.30							16
								18
					.12			20
								21
					.12			22
								23
								24
								25
					.12			26
.30	.30					.48	1.91	27
								28
.20	.20						.48	30
.40	.40							31
.30	.30							33
.10	.10							34
								35
7.44	7.64	.92	1.91	1.02	3.81	3.84	4.30	
2.48	2.48	.02	.00	.02	.36	.96	2.39	
9.92	10.12	.94	1.91	1.04	4.17	4.80	6.69	

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

Office classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.							
1	Knife	0.01	0.01	0.04	0.01	0.02	0.01	.....
2	Pistol ball	.15	.14	.27	.11	.26	.14	0.24
3	Rifle ball	.12	.12	.18	.10	.15	.12	.32
4	Shotgun	.00	.00	.....	.00	.....	.00	.....
5	Cutting and piercing instruments (other).	.03	.03	.02	.03	.01	.03	.....
6	Other military agents	.10	.10	.18	.07	.07	.10	.....
8	Air machines	.12	.12	1.48	.05	.....	.04	.....
9	Automobiles	.11	.11	.23	.08	.05	.10	.....
10	Motorcycles	.04	.05	.22	.04	.02	.04	.....
11	Railroad accidents	.16	.16	.04	.13	.07	.17	.....
12	Street-car accidents	.02	.02	.....	.02	.02	.02	.....
13	Other vehicles	.08	.08	.....	.07	.04	.08	.....
14	Animals	.01	.01	.....	.01	.....	.01	.....
15	Conflagrations	.01	.01	.02	.00	.....	.01	.....
16	Crushing	.01	.01	.....	.01	.01	.01	.08
17	Electricity	.01	.01	.....	.01	.02	.01	.....
18	Fall	.07	.07	.22	.05	.06	.06	.....
19	Falling objects	.00	.01	.02	.00	.01	.00	.....
21	Machinery	.00	.00	.....	.00	.....	.00	.....
22	Other industrial agents	.02	.02	.02	.01	.04	.02	.....
23	Excessive cold	.00	.00	.....	.00	.....	.00	.....
26	Lightning	.....	.....	.....	.....	.....	.....	.....
27	Stones	.00	.00	.....	.....	.01	.00	.....
28	Strangulation	.02	.02	.....	.02	.....	.02	.....
29	Jumping	.00	.00	.....	.00	.....	.00	.....
31	Fire, conflagrations excepted	.00	.00	.....	.00	.....	.00	.....
32	Poison	.01	.01	.02	.01	.....	.01	.....
33	Athletic exercises	.01	.01	.....	.01	.01	.01	.08
34	Drilling and marching	.00	.00	.....	.00	.....	.00	.....
35	Fighting (brawls)	.00	.01	.....	.00	.01	.01	.....
36	Other external agents	.21	.21	.31	.18	.05	.20	.08
	Total	1.34	1.35	3.24	1.04	.96	1.24	.80

The ratios for the deaths shown above are shown under the diagnosis.

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	Office classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.04	0.01	.....	0.01	0.01	0.04	0.01	0.03	0.02	0.02	1
.30	.15	0.37	.17	.18	.28	.08	.24	.12	.13	2
.04	.11	.11	.11	.10	.36	.08	.17	.12	.13	3
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	4
.04	.03	.....	.03	.03	.....	.03	.02	.03	.03	5
.07	.07	.11	.07	.07	.32	.07	.07	.12	.13	6
1.65	.11	.....	.10	.23	1.45	.01	.....	.01	.08	8
.26	.09	.04	.09	.10	.24	.09	.07	.12	.12	9
.04	.05	.07	.05	.05	.44	.03	.....	.03	.05	10
.....	.13	.11	.13	.12	.08	.14	.07	.22	.22	11
.....	.04	.04	.04	.04	.....	.01	.02	.01	.01	12
.....	.09	.04	.08	.07	.....	.07	.05	.09	.09	13
.....	.02	.....	.02	.01	.....	.01	.....	.01	.01	14
.04	.01	.....	.01	.01	.....	.....	.....	.00	.00	15
.....	.01	.....	.01	.01	.....	.01	.02	.01	01	16
.....	.01	.....	.01	.01	.....	.01	.03	.02	02	17
.19	.05	.15	.06	.07	.28	.05	.03	.07	.08	18
.....	.01	.04	.01	.01	.04	.....	.....	.....	.00	19
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	21
.....	.....	.....	.....	.....	.04	.02	.07	.04	.04	22
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26
.....	.....	.....	.....	.....	.....	.....	.02	.01	.01	27
.....	.04	.....	.04	.04	.....	.01	.....	.01	.01	28
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	29
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	31
.....	.03	.....	.03	.02	.04	.00	.....	.00	.01	32
.....	.01	.....	.01	.01	.....	.01	.02	.01	.01	33
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	34
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.01	.04	.02	.01	.....	.....	.....	.....	.....	36
.34	.30	.....	.27	.28	.32	.12	.09	.17	.17	
3.00	1.40	1.11	1.37	1.50	3.95	.89	1.01	1.25	1.37	

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

Office classification. No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.						
1	Knife						
2	Pistol ball		0.52		0.37	0.32	0.40
3	Rifle ball		.26	0.65	.37	.32	.20
4	Shotgun						.20
5	Cutting and piercing instruments (other).		.26		.18		
6	Other military agents						
8	Air machines	0.49					.20
9	Automobiles					.64	
10	Motorcycles						
11	Railroad accidents						
12	Street car accidents						
13	Other vehicles					.32	
14	Animals						
15	Conflagrations						
16	Crushing		.26		.18		
17	Electricity						
18	Falls					.32	
19	Falling objects						
21	Machinery						
22	Other industrial agents						
23	Excessive cold						
26	Lightning						
27	Stones						
28	Strangulation						.20
29	Jumping						
31	Fire, conflagrations excepted						
32	Poisons						
33	Athletic exercises						
34	Drilling and marching						
35	Fighting (brawls)						
36	Other external agents		.77		.55	.64	.40
	Total	.49	2.06	.65	1.66	2.55	1.60

TABLE XVIII.—*Deaths, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			Office classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
								1
0.40	0.40						1.43	2
.89	.89				0.12	0.48	.96	3
								4
.10	.10							5
.20	.20							6
								8
.10	.10							9
.10	.10							10
								11
								12
								13
								14
								15
						.48		16
								17
.10	.10							18
								19
								21
								22
								23
								26
								27
								28
								29
								31
								32
					.12			33
								34
								35
.60	.60	0.02		0.02	.12			36
2.48	2.48	.02	0.00	.02	.36	.96	2.39	

TABLE XIX.—*Days lost, United States Army, 1919.*

ABSOLUTE NUMBERS.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).								
1	Typhoid fever	46,129	46,121	2,767	39,549	1,134	2,671	43,354	8
3	Relapsing fever	101	101		101			101	
4	Malarial fevers (all)	34,434	29,252	1,546	23,865	3,611	230	27,706	5,182
4a	Malarial fever, estivo-autumnal.	5,006	3,905	127	3,430	326	22	3,778	1,101
4b	Malarial fever, mixed	244	158	77	57	24		81	
4c	Malarial fever, quartan	2,036	2,033	5	225	1,803		2,028	3
4d	Malarial fever, tertian	24,298	20,330	1,034	17,941	1,297	58	19,296	3,968
4e	Malarial fever, unclassified.	2,850	2,826	303	2,212	161	150	2,523	24
5	Smallpox	2,847	2,779	45	1,914	820		2,734	68
6	Measles (all)	83,135	82,839	512	73,267	6,630	2,430	82,327	296
7	Scarlet fever	74,481	74,469	1,157	71,855	280	1,177	73,312	12
8	Whooping cough	342	342	68	274			274	
9	Diphtheria and results	72,959	72,947	2,716	65,697	1,328	3,206	70,281	12
10	Influenza (all)	1,462,982	1,459,241	63,659	1,157,627	142,160	95,795	1,395,582	3,941
12	Asiatic cholera	166	141		141			141	25
14	Dysentery (all)	23,246	21,891	3,574	15,253	1,126	1,938	18,317	1,355
14a	Dysentery, bacillary	1,781	1,739	169	1,447	1	122	1,570	42
14b	Dysentery, balantidic	43							43
14c	Dysentery, entamœbic	11,255	10,672	2,822	7,033	637	180	7,850	583
14d	Dysentery (other protozoa)	25	25		25			25	
14e	Dysentery, unclassified	10,142	9,455	583	6,748	488	1,636	8,872	687
17	Leprosy	612	428		428			428	184
18	Erysipelas	10,787	10,787	816	8,386	1,139	446	9,971	
19a	Carrier, bacillus, diphtheria.	32,859	32,843	350	30,918	693	882	32,493	16
19b	Carrier, bacillus, typhoid	542	542	14	514		14	528	
19c	Carrier, meningococcus	12,938	12,938	112	12,043	372	411	12,826	
19d	Carrier, epidemic diseases, others.	2,056	1,880	59	1,804	15	2	1,821	176
19e	Chicken pox	8,708	8,099	243	5,318	2,273	265	7,856	609
19f	German measles	6,559	6,255	49	5,546	349	311	6,206	364
19g	Meningitis, cerebrospinal (epidemic).	69,261	69,200	2,335	58,211	5,406	3,248	66,865	61
19h	Mumps	655,149	650,091	6,275	543,888	72,790	27,138	643,816	5,058
19i	Paratyphoid A	5,148	5,148	276	4,203	134	535	4,872	
19j	Paratyphoid B	2,676	2,676	289	2,204	39	144	2,387	
19k	Poliomyelitis, anterior, acute.	2,417	2,417	3	2,376	38		2,414	
191	Trench fever	13,529	13,529	201	11,049	131	2,148	13,328	
19m	Trench mouth	1,403	1,403	240	1,148		15	1,163	
19n	Typhoid vaccination	10,997	10,849	275	9,946	473	155	10,574	148
19o	Vaccinia	4,359	4,336	22	4,222	83	9	4,314	23
19p	Epidemic diseases, others	6,665	5,771	963	4,482	192	134	4,808	894
20a	Septicemia, general	1,269	1,269	23	1,101	86	59	1,246	
22	Anthrax	538	538	2	501	35		536	
24	Tetanus	95	95		95			95	
25a	Trench foot	22,635	22,635	139	18,098	3,388	1,010	22,496	
25b	Mycosis (others)	1,964	1,674	5	1,108	561		1,669	290
26	Pellagra	592	586		583	3		586	6
27	Beriberi	1,589							1,589
47	Acute articular rheumatism.	61,657	61,379	1,865	51,098	6,019	2,397	59,514	278
	II. TUBERCULOSIS.								
28a	Tuberculosis of lungs	1,650,342	1,642,376	123,375	1,318,887	190,643	9,471	1,519,001	7,966
28b	Suspected tuberculosis	109,823	109,684	5,673	83,530	17,154	3,327	104,011	139
29	Acute miliary tuberculosis	7,088	7,003	51	3,308	3,423	221	6,952	85
30–35	Tuberculosis, others	76,111	75,723	3,674	54,302	17,112	635	72,049	388
	Tuberculosis (all)	1,843,364	1,834,786	132,773	1,460,027	228,332	13,654	1,702,013	8,578

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
543	3,419	24	3,443	3,986	2,224	35,938	1,110	2,670	39,718	41,942	1
.....	27	.....	27	27	.....	67	.....	.....	67	67	3
1,186	14,041	2,421	16,462	17,648	224	4,139	645	230	5,014	5,238	4
63	844	171	1,015	1,078	.....	241	.....	22	263	263	4a
77	42	24	66	143	.....	.....	.....	.....	.....	.....	4b
5	115	1,803	1,918	1,923	.....	91	.....	.....	91	91	4c
846	12,187	396	12,583	13,429	147	2,785	535	58	3,378	3,525	4d
195	853	27	880	1,075	77	1,022	110	150	1,282	1,359	4e
.....	1,093	820	1,913	1,913	.....	608	.....	.....	608	608	5
195	48,967	5,600	54,567	54,762	293	21,246	980	2,430	24,656	24,949	6
780	54,275	122	54,397	55,177	331	16,876	158	1,177	18,211	18,542	7
68	151	.....	151	219	.....	123	.....	.....	123	123	8
1,569	24,924	647	25,571	27,140	1,147	39,974	678	3,206	43,858	45,005	9
24,569	355,569	26,952	382,521	407,090	17,679	771,863	114,664	95,568	982,095	1,019,774	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
1,963	5,973	258	6,231	8,194	1,459	6,217	789	1,938	8,944	10,403	14
1	29	1	30	31	168	1,211	.....	122	1,333	1,501	14a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14b
1,568	3,629	165	3,794	5,362	1,141	1,641	407	180	2,228	3,369	14c
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14d
394	2,315	92	2,407	2,801	150	3,365	382	1,636	5,383	5,533	14e
.....	378	.....	378	378	.....	50	.....	.....	50	50	17
540	5,559	696	6,255	6,795	265	2,581	443	446	3,470	3,735	18
194	14,040	337	14,377	14,571	156	16,735	356	882	17,973	18,129	19a
.....	94	.....	94	94	14	420	.....	14	434	448	19b
20	5,668	158	5,826	5,846	92	6,222	214	411	6,847	6,979	19c
.....	663	7	670	670	59	918	8	2	928	987	19d
139	2,804	1,201	4,005	4,144	104	2,425	1,041	265	3,731	3,835	19e
41	3,922	289	4,211	4,252	.....	1,546	60	297	1,903	1,903	19f
628	18,058	2,199	20,257	20,885	1,707	39,091	3,201	3,248	45,540	47,247	19g
3,392	246,092	46,662	292,754	296,146	2,702	278,143	25,766	27,022	330,931	333,633	19h
61	240	.....	240	301	189	3,727	134	535	4,396	4,585	19i
.....	180	.....	180	180	289	1,698	39	144	1,881	2,170	19j
3	972	.....	972	975	.....	1,246	38	.....	1,284	1,284	19k
15	565	.....	565	580	186	10,484	131	2,139	12,754	12,940	19l
56	367	.....	367	423	160	709	.....	15	724	884	19m
206	6,116	191	6,307	6,513	62	3,663	276	154	4,093	4,155	19n
10	3,435	75	3,510	3,520	5	413	8	9	430	435	19o
492	1,208	91	1,299	1,791	20	1,036	46	134	1,216	1,236	19p
3	441	50	491	494	20	660	36	59	755	775	20a
2	262	35	297	299	.....	214	.....	.....	214	214	22
.....	28	.....	28	28	.....	67	.....	.....	67	67	24
23	2,352	325	2,677	2,700	116	14,902	3,063	1,010	18,975	19,091	25a
.....	679	309	988	988	5	429	252	.....	681	686	25b
.....	119	3	122	122	.....	464	.....	.....	464	464	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
1,069	26,687	2,538	29,225	30,294	785	23,483	3,475	2,371	29,329	30,114	47
100,561	936,519	114,313	1,050,832	1,151,393	21,579	368,563	75,530	9,361	453,454	475,033	28a
4,042	35,922	5,340	41,262	45,304	1,626	46,073	11,776	3,313	61,162	62,788	28b
1	1,240	788	2,028	2,029	50	2,037	2,594	221	4,852	4,902	29
2,371	27,655	7,309	34,964	37,335	1,229	24,568	9,672	635	34,875	36,104	30–35
106,975	1,001,336	127,750	1,129,086	1,236,061	24,484	441,241	99,572	13,530	554,343	578,827	

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
3	Relapsing fever		7		7		
4	Malarial fevers (all)	136	819	518	1,337		4,584
4a	Malarial fever, estivo-autumnal.	64	110	155	265		2,100
4b	Malarial fever, mixed		4		4		11
4c	Malarial fever, quartan						19
4d	Malarial fever, tertian	41	705	345	1,050		2,239
4e	Malarial fever, unclassified	31		18	18		215
5	Smallpox	45	11		11		
6	Measles (all)	24	272		272	431	198
7	Scarlet fever	46	34		34		
8	Whooping cough						
9	Diphtheria and results		27		27		11
10	Influenza (all)	1,411	892	13	905	1,014	1,366
12	Asiatic cholera		127		127		
14	Dysentery (all)	152	1,276	71	1,347		152
14a	Dysentery, bacillary						
14b	Dysentery, balantidic						
14c	Dysentery, entamœbic	113	1,029	57	1,086		127
14d	Dysentery (other protozoa)						25
14e	Dysentery, unclassified	39	247	14	261		
17	Leprosy						
18	Erysipelas	11	55		55		50
19a	Carrier, bacillus, diphtheria.		8		8		
19b	Carrier, bacillus, typhoid						
19c	Carrier, meningococcus						
19d	Carrier, epidemic diseases, others.		205		205		
19e	Chicken pox		21	13	34		
19f	German measles	8	65		65		
19g	Meningitis, cerebrospinal (epidemic).		29		29		
19h	Mumps	181	937	78	1,015	243	126
19i	Paratyphoid A	26					
19j	Paratyphoid B						
19k	Poliomyelitis, anterior, acute.						128
191	Trench fever						
19m	Trench mouth	24					
19n	Typhoid vaccination	7	49	6	55	26	11
19o	Vaccinia	7	39		39		23
19p	Epidemic diseases, others	451	1,746	55	1,801		
20a	Septicemia, general						
22	Anthrax						
24	Tetanus						
25a	Trench foot						
25b	Mycosis (others)						
26	Pellagra						
27	Beriberi						
47	Acute articular rheumatism.	11	117	6	123		47
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs	1,235	2,567	731	3,298	2,169	1,749
28b	Suspected tuberculosis	5	128		128	320	102
29	Acute military tuberculosis.						
30–35	Tuberculosis, others	74	811	131	942	185	504
	Tuberculosis (all)	1,314	3,506	862	4,368	2,674	2,355

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			
10,082	No. strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	International classification No.
Other countries and not stated.			Transports.						
White.	Color not stated.	Total.	White.	Colored.	Total.	Philippine Scouts.	Hawaiians.	Porto Ricans.	
190	1	191	2	.....	2	8	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	.....	3
221	.....	221	61	27	88	3,867	.....	1,315	4
124	.....	124	11	.....	11	670	.....	431	4a
.....	.....	.....	.....	.....	.....	86	.....	.....	4b
.....	.....	.....	.....	.....	.....	3	.....	.....	4c
.....	.....	.....	25	21	46	3,804	.....	884	4d
97	.....	97	25	6	31	24	.....	.....	4e
202	.....	202	.....	.....	.....	34	.....	34	5
845	.....	845	1,308	50	1,358	226	62	8	6
202	.....	202	468	.....	468	12	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	.....	8
166	.....	166	595	3	598	.....	12	.....	9
20,603	227	20,830	6,320	531	6,851	2,316	1,133	292	10
14	.....	14	.....	.....	.....	25	.....	.....	12
1,607	.....	1,607	28	8	36	1,270	.....	85	14
207	.....	207	.....	.....	.....	22	.....	20	14a
.....	.....	.....	.....	.....	.....	43	.....	.....	14b
607	.....	607	.....	8	8	566	.....	17	14c
.....	.....	.....	.....	.....	.....	.....	.....	.....	14d
793	.....	793	28	.....	28	639	.....	48	14e
.....	.....	.....	.....	.....	.....	.....	184	.....	17
74	.....	74	67	.....	67	.....	.....	.....	18
62	.....	62	73	.....	73	16	.....	.....	19a
.....	.....	.....	.....	.....	.....	.....	.....	.....	19b
153	.....	153	.....	.....	.....	.....	.....	.....	19c
18	.....	18	.....	.....	.....	176	.....	.....	19d
55	.....	55	13	18	31	490	74	45	19e
6	14	20	7	.....	7	298	.....	6	19f
617	.....	617	416	6	422	.....	60	1	19g
11,851	116	11,967	6,496	284	6,780	4,239	34	785	19h
236	.....	236	.....	.....	.....	.....	.....	.....	19i
326	.....	326	.....	.....	.....	.....	.....	.....	19j
30	.....	30	.....	.....	.....	.....	.....	.....	19k
.....	9	9	.....	.....	.....	.....	.....	.....	19l
.....	.....	.....	72	.....	72	.....	.....	.....	19m
51	1	52	30	.....	30	137	.....	11	19n
299	.....	299	13	.....	13	23	.....	.....	19o
470	.....	470	22	.....	22	746	2	146	19p
.....	.....	.....	.....	.....	.....	.....	.....	.....	20a
25	.....	25	.....	.....	.....	.....	.....	.....	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	24
813	.....	813	31	.....	31	.....	.....	.....	25a
.....	.....	.....	.....	.....	.....	290	.....	.....	25b
.....	.....	.....	.....	.....	.....	.....	.....	6	26
.....	.....	.....	.....	.....	.....	39	.....	1,550	27
598	26	624	166	.....	166	278	.....	.....	47
6,875	110	6,985	445	69	514	4,731	1,857	1,378	28a
653	14	667	332	38	370	89	.....	50	28b
31	.....	31	.....	41	41	85	.....	.....	29
467	.....	467	112	.....	112	65	152	171	30–35
8,026	124	8,150	889	148	1,037	4,970	2,009	1,599	

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	III. VENEREAL DISEASES (ALL).								
37	Syphilis (all)	530,472	526,551	18,107	362,277	129,567	16,600	508,444	3,921
37a	Syphilis, hereditary	1,774	1,774	.....	1,499	204	71	1,774	.....
37b	Syphilis, primary	157,600	157,098	3,390	107,826	38,686	7,196	153,708	502
37c	Syphilis, secondary	212,333	210,879	7,113	149,639	49,061	5,066	203,766	1,454
37d	Syphilis, tertiary	133,269	131,761	6,776	88,176	34,462	2,347	124,985	1,508
37e	Syphilis, unclassified	25,496	25,039	828	15,137	7,154	1,920	24,211	457
38a	Chancroidal infection	409,772	408,204	6,104	291,420	99,046	11,634	402,100	1,568
38b	Gonococcus infection	983,176	976,623	28,597	781,671	133,392	32,963	948,026	6,553
	Venereal (all)	1,923,420	1,911,378	52,808	1,435,368	362,005	61,197	1,858,570	12,042
	IV. GENERAL DISEASES (OTHER).								
36	Rickets	6,732	6,700	138	6,351	95	116	6,562	32
39–45	Cancer and other malignant tumors.	14,289	14,269	3,063	9,117	1,968	121	11,206	20
46	Tumors, benign	76,792	76,450	3,225	67,944	4,240	1,041	73,225	342
48a	Arthritis	461,175	460,557	24,166	375,632	46,458	14,301	436,391	618
48b	Gout	435	435	70	177	147	41	365	.....
49	Scurvy	195	195	.....	195	.....	.....	195	.....
50	Diabetes, mellitus	18,085	18,085	2,991	13,468	1,521	105	15,094	.....
51a	Exophthalmic goiter (hyperthyroidism).	41,908	41,855	2,682	37,359	970	844	39,173	53
51b	Cretinism and myxedema	291	267	.....	267	.....	.....	267	24
52a	Addison's disease	281	281	.....	263	18	.....	281	.....
52b	Acromegaly	460	460	.....	453	.....	7	460	.....
53a	Leukemia	885	884	9	875	.....	.....	875	1
53b	Hodgkin's disease	2,516	2,516	343	1,972	201	.....	2,173	.....
88	Goiter, simple	13,929	13,929	868	12,192	334	535	13,061	.....
116	Spleen, diseases of	828	825	263	562	.....	.....	562	3
53c	Other diseases of the ductless glands.	1,535	1,535	.....	1,482	10	43	1,535	.....
54	Anemia, chlorosis	5,828	5,704	360	5,234	71	39	5,344	124
55a	Hemophilia	266	266	.....	266	.....	.....	266	.....
55b	Obesity	111	111	.....	111	.....	.....	111	.....
55c	Purpura	894	857	12	815	18	12	845	37
55d	Muscular rheumatism	35,359	35,045	999	26,926	3,939	3,181	34,046	314
55e	General diseases, others	36,274	36,236	2,050	29,056	3,998	1,132	34,186	38
56a	Alcoholism (acute or chronic).	23,016	23,007	1,817	20,402	473	315	21,190	9
56b	Drug addiction	7,622	7,587	312	6,068	1,097	110	7,275	35
57–59	Poisoning, chronic	444	444	11	323	45	65	433	.....
	V. NERVOUS SYSTEM, DISEASES OF (ALL).								
60	Encephalitis	3,982	3,982	288	3,619	71	4	3,694	.....
61	Meningitis, simple	4,330	4,330	111	3,321	701	197	4,219	.....
62	Locomotor ataxia	3,153	3,153	440	2,274	439	.....	2,713	.....
63a	Multiple sclerosis	1,502	1,502	94	1,408	.....	.....	1,408	.....
63b	Spinal cord, diseases of (others).	8,137	8,122	425	7,086	242	359	7,687	25
64	Apoplexy	7,761	7,710	288	6,374	953	95	7,422	51
66a	Facial paralysis	9,601	9,573	807	7,908	701	157	8,766	28
66b	Paraplegia	1,798	1,798	336	1,336	78	48	1,462	.....
66c	Paralysis without specified cause (others).	11,964	11,855	513	10,414	776	152	11,342	109
69	Epilepsy	61,335	61,299	566	49,635	7,001	4,097	60,733	36
74a	Jacksonian epilepsy	1,002	1,002	9	945	48	.....	993	.....
74b	Neurasthenia	130,195	130,022	19,149	104,243	2,901	3,729	110,873	173

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	International classification No.
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
10,219	179,281	85,864	265,145	275,364	7,529	164,649	43,294	16,325	224,268	231,797	37
.....	836	11	847	847	.....	618	193	71	882	882	37a
1,504	48,986	25,637	74,623	76,127	1,875	55,583	13,049	7,182	75,814	77,689	37b
3,298	79,806	39,002	118,808	122,106	3,467	57,978	10,020	5,031	73,029	76,496	37c
5,117	43,720	19,016	62,736	67,853	1,659	41,493	15,082	2,121	58,696	60,355	37d
300	5,933	2,198	8,131	8,431	528	8,977	4,950	1,920	15,847	16,375	37e
1,453	83,415	60,735	144,150	145,603	4,482	172,277	35,496	11,586	219,359	223,841	38a
8,123	366,538	95,700	462,238	470,361	19,946	394,464	31,941	32,963	459,368	479,314	38b
19,795	629,234	242,299	871,533	891,328	31,957	731,390	110,731	60,874	902,995	934,952	
78	2,949	22	2,971	3,049	60	3,156	73	116	3,345	3,405	36
1,867	4,325	1,554	5,879	7,746	831	4,364	386	121	4,871	5,702	39–45
2,410	16,063	1,358	17,421	19,831	734	17,781	2,878	829	21,488	22,222	46
12,173	123,265	10,206	133,471	145,644	11,847	243,238	36,180	14,301	293,719	305,566	48a
39	22	147	169	208	23	155	.....	41	196	219	48b
.....	.....	.....	.....	.....	.....	195	.....	.....	195	195	49
1,924	6,387	645	7,032	8,956	1,067	6,606	876	105	7,587	8,654	50
1,098	12,308	79	12,387	13,485	1,584	23,904	891	844	25,639	27,223	51a
.....	166	.....	166	166	.....	101	.....	.....	101	101	51b
.....	236	18	254	254	.....	27	.....	.....	27	27	52a
.....	33	.....	33	33	.....	420	.....	7	427	427	52b
9	328	.....	328	337	.....	545	.....	.....	545	545	53a
343	710	63	773	1,116	.....	1,198	138	.....	1,336	1,336	53b
390	4,553	221	4,774	5,164	478	6,976	113	535	7,624	8,102	88
251	198	.....	198	449	12	364	.....	.....	364	376	116
.....	688	10	698	698	.....	588	.....	43	631	631	53c
95	2,401	36	2,437	2,532	265	2,792	35	39	2,866	3,131	54
.....	175	.....	175	175	.....	91	.....	.....	91	91	55a
.....	57	.....	57	57	.....	54	.....	.....	54	54	55b
12	145	.....	145	157	.....	667	18	12	697	697	55c
576	10,118	1,947	12,065	12,641	401	15,238	1,984	3,181	20,403	20,804	55d
577	5,746	437	6,183	6,760	1,473	22,963	3,558	1,132	27,653	29,126	55e
393	5,554	186	5,740	6,133	1,388	12,384	259	315	12,958	14,346	56a
114	3,958	912	4,870	4,984	137	2,110	113	110	2,333	2,470	56b
4	111	17	128	132	7	206	28	65	299	306	57–59
60	1,484	66	1,550	1,640	198	2,135	5	.....	2,140	2,338	60
56	987	121	1,108	1,164	55	2,334	580	197	3,111	3,166	61
353	925	39	964	1,317	87	1,170	400	.....	1,570	1,657	62
61	711	.....	711	772	33	556	.....	.....	556	599	63a
269	3,754	190	3,944	4,213	150	2,970	52	359	3,381	3,531	63b
25	3,379	941	4,320	4,345	263	2,769	12	95	2,876	3,139	64
373	3,593	292	3,885	4,258	434	4,109	409	157	4,675	5,109	66a
279	748	27	775	1,054	57	415	51	48	514	571	66b
207	4,556	389	4,945	5,152	286	5,558	387	152	6,097	6,383	66c
516	18,574	2,389	20,963	21,479	38	29,062	4,612	3,973	37,647	37,685	69
.....	492	48	540	540	9	453	.....	.....	453	462	74a
9,475	40,084	1,154	41,238	50,713	8,995	61,183	1,747	3,729	66,659	75,654	74b

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)	359	2,454	409	2,863	895	869
37a	Syphilis, hereditary						
37b	Syphilis, primary	11	245		245	262	113
37c	Syphilis, secondary	348	1,121	39	1,160	261	444
37d	Syphilis, tertiary		1,077	364	1,441	312	282
37e	Syphilis, unclassified		11	6	17	60	30
38a	Chancroidal infection	169	7,503	2,635	10,138	145	3,337
38b	Gonococcus infection	528	10,189	5,607	15,796	5,356	3,073
	Venereal (all)	1,056	20,146	8,651	28,797	6,396	7,279
	IV. GENERAL DISEASES (OTHER).						
36	Rickets						
39–45	Cancer and other malignant tumors.	365	230	28	258	12	
46	Tumors, benign	81	143	4	147	29	73
48a	Arthritis	146	555	45	600	383	554
48b	Gout	8					
49	Scurvy						
50	Diabetes, mellitus		4		4		
51a	Exophthalmic goiter (hyperthryoidism).		116		116	113	73
51b	Cretinism and myxedema						
52a	Addison's disease						
52b	Acromegaly						
53a	Leukemia						2
53b	Hodgkin's disease						64
88	Goiter, simple		112		112	56	48
116	Spleen, diseases of						
53c	Other diseases of the ductless glands.						
54	Anemia, chlorosis		13		13		
55a	Hemophilia						
55b	Obesity						
55c	Purpura						
55d	Muscular rheumatism	22	296		296	109	17
55e	General diseases, others		4	3	7	54	20
56a	Alcoholism (acute or chronic).	36	327	28	355	250	204
56b	Drug addiction	61		72	72		
57–59	Poisoning, chronic					6	
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
62	Locomotor ataxia		126		126		
63a	Multiple sclerosis						
63b	Spinal cord, diseases of (others).	6	29		29		140
64	Apoplexy						
66a	Facial paralysis						
66b	Paraplegia		173		173		
66c	Paralysis without specified causes (others).	20	180		180	13	
69	Epilepsy	12	309		309	403	199
74a	Jacksonian epilepsy						
74b	Neurasthenia	679	572		572	55	1,302

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
13,392	275	13,667	737	.....	737	1,141	579	2,201	37
45	.....	45	.....	.....	.....	.....	.....	.....	37a
2,419	14	2,433	218	.....	218	53	43	406	37b
9,630	35	9,665	399	.....	399	831	45	578	37c
1,181	226	1,407	111	.....	111	90	491	927	37d
117	.....	117	9	.....	9	167	.....	290	37e
23,655	48	23,703	1,088	180	1,268	564	94	910	38a
359	.....	359	1,692	144	1,836	3,406	1,768	1,379	38b
37,406	323	37,729	3,517	324	3,841	5,111	2,441	4,490	
211	.....	211	35	.....	35	32	.....	.....	36
.....	.....	.....	186	.....	186	8	12	.....	39–45
33,855	212	34,067	.....	.....	.....	245	22	75	46
7,069	.....	7,069	568	27	595	172	258	188	48a
.....	.....	.....	.....	.....	.....	.....	.....	.....	48b
.....	.....	.....	.....	.....	.....	.....	.....	.....	49
471	.....	471	.....	.....	.....	.....	.....	.....	50
837	.....	837	8	.....	8	53	.....	.....	51a
.....	.....	.....	.....	.....	.....	.....	.....	24	51b
.....	.....	.....	.....	.....	.....	.....	.....	.....	52a
.....	.....	.....	.....	.....	.....	.....	.....	.....	52b
.....	.....	.....	.....	.....	.....	.....	.....	1	53a
.....	.....	.....	.....	.....	.....	.....	.....	.....	53b
398	.....	398	49	.....	49	.....	.....	.....	88
.....	.....	.....	.....	.....	.....	.....	.....	3	116
206	.....	206	.....	.....	.....	.....	.....	.....	53c
28	.....	28	.....	.....	.....	107	.....	17	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	55a
.....	.....	.....	.....	.....	.....	.....	.....	.....	55b
.....	.....	.....	3	.....	3	.....	37	.....	55c
1,101	.....	1,101	47	8	55	284	9	21	55d
246	.....	246	23	.....	23	24	14	.....	55e
1,670	.....	1,670	13	.....	13	1	.....	8	56a
.....	.....	.....	.....	.....	.....	.....	35	.....	56b
.....	.....	.....	.....	.....	.....	.....	.....	.....	57–59
.....	4	4	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	61
.....	.....	.....	53	.....	53	.....	.....	.....	62
131	.....	131	.....	.....	.....	.....	.....	.....	63a
193	.....	193	.....	.....	.....	6	.....	19	63b
226	.....	226	.....	.....	.....	51	.....	.....	64
206	.....	206	.....	.....	.....	28	.....	.....	66a
.....	.....	.....	.....	.....	.....	.....	.....	.....	66b
48	.....	48	59	.....	59	100	.....	9	66c
1,003	124	1,127	85	.....	85	36	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	74a
775	.....	775	272	.....	272	.....	40	133	74b

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—contd.								
74c	Enuresis	13,503	13,503	68	12,092	1,103	240	13,435	.....
74d	Neurosis	3,821	3,815	835	2,829	71	80	2,980	6
74e	Neuro-circulatory asthenia (disordered action of the heart).	74,110	74,110	1,642	63,231	5,490	3,747	72,468	.....
74f	Shell shock (cause not given).	8,622	8,620	1,424	6,521	32	643	7,196	2
72	Chorea	2,168	2,157	.....	2,051	6	100	2,157	11
73a	Hysteria and results (psychoses excepted).	89,554	89,477	4,765	76,755	5,559	2,398	84,712	77
73b	Neuralgia	14,191	14,092	1,265	10,953	1,360	514	12,827	99
73c	Neuritis	68,890	68,389	9,228	53,664	3,416	2,081	59,161	501
73d	Speech, defective	513	513	41	460	12	.....	472	.....
74g	Nervous system, other diseases of.	35,066	34,981	15,715	17,109	1,485	672	19,266	85
	VI. MENTAL ALIENATION.								
67	General paralysis of the insane.	13,680	13,680	1,460	10,531	1,579	110	12,220	.....
68a	Constitutional psychopathic states.	79,357	79,357	2,202	74,140	1,867	1,148	77,155	.....
68b	Mental deficiency	94,744	94,255	117	78,990	14,510	638	94,138	489
68c	Malingering	460	450	.....	373	48	29	450	10
68d	Dementia præcox	273,732	272,769	2,981	245,304	22,714	1,770	269,788	963
68e	Psychasthenia	13,001	13,001	2,525	10,129	63	284	10,476	.....
68f	Psychoneurosis	45,226	45,226	6,338	36,503	1,365	1,020	38,888	.....
68g	Psychosis, alcoholic	9,761	9,761	698	8,523	229	311	9,063	.....
68h	Psychosis, manic depressive.	99,470	99,470	7,847	84,482	6,129	1,012	91,623	.....
68i	Psychosis (others)	93,190	93,034	4,605	76,859	9,774	1,796	88,429	156
	VII. EYES AND THEIR ANNEXA, DISEASES OF.								
75a	Refractive errors (all)	32,892	32,812	924	29,508	1,452	928	31,888	80
	(1) Astigmatism	15,114	15,049	346	13,777	667	259	14,703	65
	(2) Hyperopia	6,248	6,248	226	5,341	377	304	6,022	.....
	(3) Myopia	8,304	8,289	134	7,573	389	193	8,155	15
	(4) Defective vision (cause not stated).	3,226	3,226	218	2,817	19	172	3,008	.....
75b	Strabismus	4,737	4,688	167	4,092	385	44	4,521	49
75c	Leucoma	2,074	2,074	7	1,450	598	19	2,067	.....
75d	Cataract	4,927	4,921	202	4,106	379	234	4,719	6
75e	Trachoma	18,526	18,446	497	16,958	618	373	17,949	80
75f	Conjunctivitis (others)	46,118	45,575	1,831	36,258	5,672	1,814	43,744	543
75g	Pterygium	5,436	5,208	449	3,874	639	246	4,759	228
75h	Amblyopia	6,879	6,879	77	6,091	627	84	6,802	.....
75i	Amaurosis	665	650	.....	417	149	84	650	15
75j	Choroiditis	8,508	8,508	759	6,707	858	184	7,749	.....
75k	Iritis	21,480	21,415	1,770	15,770	3,414	461	19,645	65
75l	Keratitis	30,414	30,156	1,566	21,999	5,315	1,276	28,590	258
75m	Retinitis	6,570	6,570	736	5,522	227	85	5,834	.....
75n	Nystagmus	590	590	.....	571	19	.....	590	.....
75o	Glaucoma	1,752	1,752	382	1,246	124	.....	1,370	.....
75p	Eyelids, diseases of	7,181	7,156	205	6,253	543	155	6,951	25
75r	Eyes and annexa, other diseases of.	31,861	31,722	1,770	25,688	3,463	801	29,952	139

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
68	4,396	344	4,740	4,808	.....	6,929	573	240	7,742	7,742	74c
377	1,386	38	1,424	1,801	440	1,305	33	80	1,418	1,858	74d
528	8,548	286	8,834	9,362	1,114	54,367	5,204	3,747	63,318	64,432	74e
345	1,400	.....	1,400	1,745	1,079	4,945	32	643	5,620	6,699	74f
.....	1,170	6	1,176	1,176	.....	7,756	.....	100	856	856	72
2,889	27,230	1,650	28,880	31,769	1,782	48,074	3,909	2,398	54,381	56,163	73a
477	4,635	566	5,201	5,678	782	5,919	770	511	7,200	7,982	73b
5,684	19,388	919	20,307	25,991	3,454	32,293	2,448	2,058	36,799	40,253	73c
1	325	12	337	338	40	21	.....	.....	21	61	73d
3,129	6,468	379	6,847	19,976	2,494	10,311	1,101	672	12,084	14,578	74g
941	5,132	975	6,107	7,048	519	5,399	604	110	6,113	6,632	67
932	28,465	728	29,193	30,125	1,270	43,584	980	1,134	45,698	46,968	68a
29	22,807	5,019	27,826	27,855	88	52,579	9,311	638	62,528	62,616	68b
.....	164	43	207	207	.....	183	.....	29	212	212	68c
1,829	128,183	10,955	139,138	140,967	1,077	114,041	11,253	1,770	127,064	128,141	68d
1,705	3,871	.....	3,871	5,576	817	6,039	63	284	6,386	7,203	68e
2,706	12,125	200	12,325	15,031	3,279	24,085	1,165	1,020	26,270	29,549	68f
429	2,955	44	2,999	3,428	269	5,034	185	311	5,530	5,799	68g
2,970	43,708	2,349	46,057	49,027	4,293	39,938	3,767	1,012	44,717	49,010	68h
2,144	26,931	3,441	30,372	32,516	2,461	49,304	6,309	1,714	57,327	59,788	68i
366	5,663	157	5,820	6,186	527	21,794	1,295	928	24,017	24,544	75a
118	2,574	71	2,645	2,763	202	10,218	596	259	11,073	11,275	(1)
23	1,348	24	1,372	1,395	203	3,735	353	304	4,392	4,595	(2)
88	1,223	43	1,266	1,354	41	5,585	346	193	6,124	6,165	(3)
137	518	19	537	674	81	2,256	.....	172	2,428	2,509	(4)
3	1,743	208	1,951	1,954	164	2,168	177	44	2,389	2,553	75b
.....	615	149	764	764	7	802	449	19	1,270	1,277	75c
55	1,443	33	1,476	1,531	147	2,663	346	234	3,243	3,390	75d
453	8,467	223	8,690	9,143	44	8,189	395	373	8,957	9,001	75e
857	11,741	1,987	13,728	14,585	930	23,273	3,634	1,814	28,721	29,651	75f
321	1,722	259	1,981	2,302	116	1,992	380	246	2,618	2,734	75g
23	1,233	163	1,396	1,419	54	4,725	464	84	5,273	5,327	75h
.....	22	.....	22	22	.....	328	149	84	561	561	75i
554	2,085	173	2,258	2,812	205	4,553	685	184	5,422	5,627	75j
850	7,703	1,367	9,070	9,920	920	7,633	2,047	455	10,135	11,055	75k
918	6,924	1,609	8,533	9,451	648	14,773	3,706	1,276	19,755	20,403	75l
487	2,202	137	2,339	2,826	249	3,142	90	85	3,317	3,566	75m
.....	171	11	182	182	.....	337	8	.....	345	345	75n
226	645	25	670	896	156	493	99	.....	592	748	75o
154	2,525	171	2,696	2,850	49	3,240	372	155	3,767	3,816	75p
961	9,884	1,495	11,379	12,340	797	15,352	1,957	801	18,110	18,907	75r

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—contd.						
74c	Enuresis		170	186	356	378	11
74d	Neurosis	18				16	112
74e	Neuro-circulatory asthenia (disordered action of the heart).						7
74f	Shell shock (cause not given).						
72	Chorea		125		125		
73a	Hysteria and results (psychoses excepted).	94	34		34	35	162
73b	Neuralgia	6	126	24	150	24	41
73c	Neuritis	90	23	49	72	83	175
73d	Speech, defective						
74g	Nervous system, other diseases of.	92	63	5	68	13	184
	VI. MENTAL ALIENATION.						
67	General paralysis of the insane.						
68a	Constitutional psychopatic states.			159	159	324	298
68b	Mental deficiency		350	180	530	482	39
68c	Malingering		7	5	12		1
68d	Dementia præcox	75	98	506	604	22	1,276
68e	Psychasthemia	3	7		7	2	
68f	Psychoneurosis	353	112		112	64	
68g	Psychosis, alcoholic						280
68h	Psychosis, manic depressive.	584	54	13	67		154
68i	Psychosis (others)		49	24	73	126	277
	VII. EYES AND THEIR ANNEXA, DISEASES OF.						
75a	Refractive errors (all)	31	194		194	41	
	(1) Astigmatism	26	29		29	12	
	(2) Hyperopia		59		59	29	
	(3) Myopia	5	106		106		
	(4) Defective vision (cause not stated).						
75b	Strabismus		56		56		
75c	Leucoma					13	
75d	Cataract						
75e	Trachoma		132		132		1
75f	Conjunctivitis (others)	44	56	19	75	144	126
75g	Pterygium	12	16		16	4	40
75h	Amblyopia					28	
75i	Amaurosis						
75j	Choroiditis					62	7
75k	Iritis		105		105	65	
75l	Keratitis		12		12	93	7
75m	Retinitis		40		40		12
75n	Nystagmus					4	
75o	Glaucoma		69		69	16	
75p	Eyelids, diseases of	2	21		21	330	26
75r	Eyes and annexa, other diseases of.	12	45	11	56	207	15

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
208		208							74c
10		10						6	74d
188		188	121		121				74e
176		176				2			74f
								11	72
1,120		1,120	100		100		24	53	73a
177	3	180	31		31	80	10	9	73b
1,594	23	1,617	108		108	129	69	303	73c
114		114							73d
62		62	8		8	78	7		74g
									67
1,442	14	1,456	27		27				68a
2,670		2,670	63		63	239	222	28	68b
16		16	2		2	2		8	68c
1,541		1,541	143		143	656	109	198	68d
210		210							68e
117		117							68f
245		245	9		9				68g
628		628							68h
163	8	245	9		9	15		141	68i
1,783		1,783	33		33	74		6	75a
911		911	33		33	65			(1)
170		170							(2)
659		659				9		6	(3)
43		43							(4)
125		125					49		75b
			20		20				75c
						6			75d
169		169				5	27	48	75e
846		846	72	32	104	394	87	62	75f
37		37	63		63	179	13	36	75g
105		105							75h
67		67					15		75i
									75j
31	6	37	233		233			65	75k
155		155	35		35	75	183		75l
126		126							75m
59		59							75n
23		23							75o
105		105	6		6	21	3	1	75p
180		180	5		5	35	84	20	75r

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	VIII. EAR, DISEASES OF.								
76a	Otitis media	305,220	304,917	13,814	268,357	12,787	9,959	291,103	303
76b	Mastoiditis	32,360	32,339	561	28,758	2,477	543	31,778	21
76c	Otitis external	4,284	4,210	253	3,596	83	278	3,957	74
76d	Defective hearing (cause not stated).	2,355	2,355	182	2,046	48	79	2,173	
76e	Ear, other diseases of	4,844	4,787	502	3,607	556	122	4,285	57
	IX. NASAL FOSSÆ, DISEASES OF.								
86a	Adenoids	2,311	2,311	167	2,014	47	83	2,144	
86b	Deviation of nasal septum and spurs.	40,594	40,574	5,926	32,851	540	1,257	34,648	20
86d	Turbinate hypertrophy	12,577	12,404	627	10,204	912	661	11,777	173
86e	Sinusitis (all)	105,699	105,646	15,130	82,376	5,237	2,903	90,516	53
86f	Polypus nasal	3,414	3,414	630	2,499	117	168	2,784	
86g	Perforated nasal septum	409	409		370	39		409	
86h	Rhinitis (cause not stated)	62,701	62,502	3,913	53,107	4,592	890	58,589	199
86i	Nasal fossæ, other diseases of.	16,546	16,517	745	13,690	1,951	131	15,772	29
	X. THROAT, DISEASES OF.								
87a	Laryngitis, acute catarrhal.	68,646	68,465	3,749	57,444	4,280	2,992	64,716	181
87b	Larynx, other diseases of	387	387	1	386			386	
100a	Tonsillitis, acute	419,334	418,525	17,978	361,475	32,535	6,537	400,547	809
100b	Tonsillitis, chronic	96,097	95,934	14,334	76,968	2,168	2,464	81,600	163
100c	Tonsils, focal infection from.	3,756	3,754	597	2,706	348	103	3,157	2
100d	Pharyngitis, acute catarrhal.	115,475	114,975	5,528	97,324	7,658	4,465	109,447	500
100e	Pharynx, other diseases of.	68,676	68,594	7,025	58,204	1,532	1,833	61,569	82
	XI. CIRCULATORY SYSTEM, DISEASES OF.								
77	Pericarditis	4,565	4,565	80	3,667	687	131	4,485	
78	Endocarditis, acute	2,159	2,159	139	1,551	242	227	2,020	
79a	Valvular diseases of the heart.	152,062	151,505	7,747	122,846	18,011	2,901	143,758	557
	(1) Aortic insufficiency	13,780	13,741	1,019	10,578	1,839	305	12,722	39
	(2) Aortic stenosis	2,504	2,504	351	1,760	320	73	2,153	
	(3) Mitral insufficiency	110,398	109,966	5,184	89,555	13,456	1,771	104,782	432
	(4) Mitral stenosis	17,571	17,557	670	15,008	1,465	414	16,887	14
	(5) Combined lesions, mitral aortic.	4,831	4,803	245	3,890	668		4,558	28
	(6) Pulmonic lesions	107	107		107			107	
	(7) Tricuspid lesions								
	(8) Valvular lesions, unclassified.	2,871	2,827	278	1,948	263	338	2,549	44
79b	Cardiac hypertrophy	5,742	5,742	609	4,289	651	193	5,133	
79c	Cardiac dilation	2,656	2,656	685	1,845	115	11	1,971	
79d	Myocarditis and myocardial insufficiency.	32,240	32,162	5,025	23,200	3,143	794	27,137	78
79e	Heart, other organic diseases of.	15,547	15,420	416	12,267	2,181	556	15,004	127
80	Angina pectoris	1,105	1,105	206	769	109	21	899	
81a	Aneurisms	2,142	2,142	354	1,329	459		1,788	
81b	Arterial sclerosis and hypertension.	5,750	5,672	2,174	3,027	429	42	3,498	78

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
5,594	84,662	3,257	87,919	93,513	8,111	176,428	9,313	9,792	195,533	203,644	76a
113	14,555	676	15,231	15,344	448	13,620	1,801	543	15,964	16,412	76b
184	1,723	42	1,765	1,949	35	1,350	41	278	1,669	1,704	76c
172	387	.....	387	559	10	1,607	48	79	1,734	1,744	76d
332	1,281	106	1,387	1,719	163	2,165	300	122	2,587	2,750	76e
66	862	40	902	968	97	1,044	7	83	1,134	1,231	86a
4,621	17,313	123	17,436	22,057	1,171	14,587	363	1,236	16,186	17,357	86b
534	5,459	661	6,120	6,654	36	4,102	251	661	5,014	5,050	86d
5,319	23,379	1,046	24,425	29,744	9,481	57,300	4,148	2,903	64,351	73,832	86e
114	1,199	31	1,230	1,344	516	1,296	86	168	1,550	2,066	86f
.....	72	39	111	111	.....	298	.....	.....	298	298	86g
2,653	32,585	2,420	35,005	37,658	1,156	19,398	2,049	875	22,322	23,478	86h
642	11,653	1,777	13,430	14,072	98	1,904	173	131	2,208	2,306	86i
1,319	15,672	1,546	17,218	18,537	2,411	40,080	2,733	2,991	45,804	48,215	87a
1	140	.....	140	141	.....	90	.....	.....	90	90	87b
12,176	232,186	21,378	253,564	265,740	5,500	118,615	10,706	6,494	135,815	141,315	100a
11,290	43,941	809	44,750	56,040	2,854	31,242	1,254	2,456	34,952	37,806	100b
552	2,358	348	2,706	3,258	45	277	.....	103	380	425	100c
3,359	64,974	5,069	70,043	73,402	1,970	31,056	2,537	4,461	38,054	40,024	100d
3,569	23,429	620	24,049	27,618	3,379	33,130	865	1,833	35,828	39,207	100e
.....	1,265	266	1,531	1,531	80	2,368	421	131	2,920	3,000	77
3	740	171	911	914	136	798	71	227	1,096	1,232	78
2,972	45,648	4,908	50,556	53,528	4,475	72,241	13,065	2,889	88,195	92,670	79a
576	5,226	911	6,137	6,713	443	5,263	891	305	6,459	6,902	(1)
.....	791	133	924	924	351	856	187	73	1,116	1,467	(2)
1,864	31,548	3,021	34,569	36,433	3,088	53,991	10,434	1,759	66,184	69,272	(3)
291	5,288	421	5,709	6,000	356	9,252	1,044	414	10,710	11,066	(4)
125	1,765	419	2,184	2,309	120	1,952	249	.....	2,201	2,321	(5)
.....	53	.....	53	53	.....	.....	.....	.....	.....	.....	(6)
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	(7)
116	977	3	980	1,096	117	927	260	338	1,525	1,642	(8)
177	1,410	214	1,624	1,801	432	2,790	415	193	3,398	3,830	79b
586	1,041	89	1,130	1,716	99	760	26	11	797	896	79c
2,800	9,624	818	10,442	13,242	2,091	12,880	2,100	794	15,774	17,865	79d
142	5,210	748	5,958	6,100	274	6,360	1,433	556	8,349	8,623	79e
63	342	41	383	446	143	427	68	21	516	659	80
39	825	418	1,243	1,282	315	504	41	.....	545	860	81a
1,510	1,639	288	1,927	3,437	664	1,249	141	42	1,432	2,096	81b

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	VIII. EAR, DISEASES OF.						
76a	Otitis media	109	219	114	333	405	687
76b	Mastoiditis		26		26	49	36
76c	Otitis externa	34	143		143	11	285
76d	Defective hearing (cause not stated).					46	6
76e	Ear, other diseases of	7	1	150	151	97	
	IX. NASAL FOSSÆ, DISEASES OF.						
86a	Adenoids	4				97	
86b	Deviation of nasal septum and spurs.	134	49	54	103	174	398
86d	Turbinate hypertrophy	57	105		105	339	90
86e	Sinusitis (all)	330	208	41	249	249	28
86f	Polypus nasal						4
86g	Perforated nasal septum						
86h	Rhinitis (cause not stated)	104	148	105	253	81	249
86i	Nasal fossæ, other diseases of.	5	17	1	18	2	
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal	19	39		39	200	15
87b	Larynx, other diseases of						
100a	Tonsilitis, acute	302	762	367	1,129	663	808
100b	Tonsillitis, chronic	190	355	105	460	11	252
100c	Tonsils, focal infection from						
100d	Pharyngitis, acute catarrhal.	199	293	47	340	130	67
100e	Pharynx, other diseases of	77	229	47	276	71	24
	XI. CIRCULATORY SYSTEM, DISEASES OF.						
77	Pericarditis		34		34		
78	Endocarditis, acute						
79a	Valvular diseases of the heart.	300	392	38	430	1,090	241
	(1) Aortic insufficiency			37	37		
	(2) Aortic stenosis		113		113		
	(3) Mitral insufficiency	232	237	1	238	893	140
	(4) Mitral stenosis	23	32		32	79	11
	(5) Combined lesions, mitral aortic.					64	90
	(6) Pulmonic lesions					54	
	(7) Tricuspid lesions						
	(8) Valvular lesions, unclassified.	45	10		10		
79b	Cardiac hypertrophy			22	22	67	
79c	Cardiac dilatation		16		16	5	
79d	Myocarditis and myocardial insufficiency.	134	126	218	344		
79e	Heart, other organic diseases of.		376		376	94	
80	Angina pectoris						
81a	Aneurisms						
81b	Arterial sclerosis and hypertension.					57	

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	International classification No.
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
320	167	5,487	636	103	739	53	70	180	76a
414	.....	414	58	.....	58	.....	.....	21	76b
82	.....	82	2	.....	2	39	23	12	76c
.....	.....	.....	.....	.....	.....	.....	.....	.....	76d
63	.....	63	.....	.....	.....	55	.....	2	76e
11	.....	11	.....	.....	.....	.....	.....	.....	86a
330	21	351	.....	.....	.....	2	18	.....	86b
108	.....	108	1	.....	1	.....	40	133	86d
1,123	.....	1,123	89	2	91	24	24	5	86c
.....	.....	.....	.....	.....	.....	.....	.....	.....	86f
.....	.....	.....	.....	.....	.....	.....	.....	.....	86g
520	15	535	126	18	144	161	1	37	86h
103	.....	103	11	.....	11	29	.....	.....	86i
1,438	1	1,439	.....	1	1	106	32	43	87a
156	.....	156	.....	.....	.....	.....	.....	.....	87b
6,861	43	6,904	1,580	84	1,664	414	142	253	100a
998	8	1,006	169	.....	169	52	11	100	100b
71	.....	71	.....	.....	.....	2	.....	.....	100c
617	4	621	187	5	192	311	14	175	100d
1,253	.....	1,253	68	.....	68	55	6	21	100e
.....	.....	.....	.....	.....	.....	.....	.....	.....	77
13	.....	13	.....	.....	.....	.....	.....	.....	78
2,848	12	2,860	386	.....	386	223	122	212	79a
89	.....	89	.....	.....	.....	.....	.....	39	(1)
.....	.....	.....	.....	.....	.....	.....	.....	.....	(2)
2,398	12	2,410	348	.....	348	181	122	129	3)
346	.....	346	.....	.....	.....	14	.....	.....	
.....	.....	.....	19	.....	19	28	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	6)
.....	.....	.....	.....	.....	.....	.....	.....	.....	(7)
15	.....	15	19	.....	19	.....	.....	44	(8)
22	.....	22	.....	.....	.....	.....	.....	.....	79b
23	.....	23	.....	.....	.....	.....	.....	.....	79c
483	.....	483	87	7	94	78	.....	.....	79d
218	.....	218	9	.....	9	121	.....	6	79e
.....	.....	.....	.....	.....	.....	.....	.....	.....	80
.....	.....	.....	.....	.....	.....	.....	.....	.....	81a
82	.....	82	.....	.....	.....	78	.....	.....	81b

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XI. CIRCULATORY SYSTEM, DISEASES OF—continued.								
81c	Aortitis	588	588	34	366	188	.....	554	.....
81d	Arteries, other diseases of	421	421	140	249	32	.....	281	.....
82	Embolism and thrombosis	4,117	4,117	637	3,186	228	66	3,480	.....
83a	Hemorrhoids	166,785	166,410	14,388	131,887	13,745	6,390	152,022	375
83b	Varicocele	57,819	57,612	2,241	52,143	1,618	1,610	55,371	207
83c	Varicose veins	41,092	40,959	2,900	35,886	1,469	704	38,059	133
83d	Phlebitis	14,847	14,847	973	13,572	171	131	13,874	.....
84a	Status lymphaticus	23	23	.....	23	.....	.....	23	.....
84b	Lymphatic system, other diseases of	105,334	103,856	4,088	76,234	20,968	2,566	99,768	1,478
85a	Cardiac arrhythmias	6,182	6,173	924	4,563	579	107	5,249	9
85b	Cardiac murmurs, not organic	1,176	1,172	157	952	16	47	1,015	4
85c	Cardiac disorders, functional	23,293	23,293	1,436	19,814	1,431	612	21,857	.....
85d	Bradycardia	148	128	.....	128	.....	.....	128	20
85e	Heart block	120	96	.....	96	.....	.....	96	24
85f	Tachycardia	27,059	26,971	1,029	23,054	1,553	1,335	25,942	88
85g	Hemorrhage	2,585	2,574	432	2,055	72	15	2,142	11
85h	Circulatory system, other diseases of	1,023	1,016	23	734	222	37	993	7
	XII. RESPIRATORY SYSTEM, DISEASES OF.								
89–90	Bronchitis	996,461	991,880	59,259	801,472	87,940	43,209	932,621	4,581
91	Pneumonia, broncho	375,432	375,003	14,639	285,670	56,969	17,725	360,364	429
92a	Pneumonia, lobar	351,719	350,110	9,383	227,445	99,980	13,302	340,727	1,609
92b	Pneumonia, unclassified	24,817	24,817	1,585	16,058	4,400	2,774	23,232	.....
93a	Pleurisy, suppurative	142,020	141,809	3,896	122,439	13,522	1,952	137,913	211
93b	Pleurisy, serofibrinous	110,218	109,879	3,521	91,995	12,129	2,234	106,358	339
93c	Pleura, other diseases of	122,914	122,664	4,980	97,366	16,672	3,646	117,684	250
96	Asthma	50,469	49,914	3,165	38,579	6,654	1,516	46,749	555
97	Pulmonary emphysema	3,336	3,336	191	2,766	285	94	3,145	.....
98	Lungs, other diseases of	6,063	6,039	1,081	3,777	385	796	4,958	24
	XIII. DIGESTIVE SYSTEM, DISEASES OF.								
99a	Pyorrhea alveolaris	21,016	20,997	1,777	18,067	578	575	19,220	19
99b	Abscess periapical, focal infection from	936	936	158	710	24	44	778	.....
99c	Mouth and annexa, other diseases of	51,343	51,000	4,189	41,241	3,455	2,115	46,811	343
101	Esophagus, diseases of	990	990	.....	970	20	.....	990	.....
102a	Ulcer of the stomach	22,197	21,965	3,464	17,159	959	383	18,501	232
102b	Gastro-enteroptosis	8,049	8,049	1,168	6,485	207	189	6,881	.....
102c	Stomach, other diseases of	139,936	138,731	9,579	115,931	8,367	4,854	129,152	1,205
105a	Duodenal ulcer	15,458	15,458	3,473	11,286	418	281	11,985	.....
105b	Diarrhea	21,591	21,273	1,009	16,769	1,076	2,419	20,264	318
105c	Enteritis and colitis	123,714	123,184	7,228	102,174	6,448	7,334	115,956	530
106	Ankylostomiasis (uncinariasis, hookworm)	8,727	7,193	33	6,398	455	307	7,160	1,534
107a	Ascaris lumbricoides	1,847	971	5	377	573	16	966	876
107b	Cestodes	3,498	3,456	328	2,832	111	185	3,128	42
107c	Intestinal parasites, others	1,640	1,323	176	1,055	86	6	1,147	317
108	Appendicitis (all)	364,019	362,550	24,664	305,346	20,287	12,253	337,886	1,469
109a	Hernia	435,469	434,645	29,950	376,967	19,092	8,636	404,695	824
109b	Intestinal obstruction	5,009	5,003	645	4,021	280	57	4,358	6

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
.....	.....	59	59	59	34	366	129	.....	495	529	81c
.....	43	32	75	75	135	112	.....	.....	112	247	81d
573	1,708	11	1,719	2,292	46	1,478	217	66	1,761	1,807	82
9,929	40,421	3,660	44,081	54,010	4,201	88,089	9,877	6,390	104,356	108,557	83a
1,283	19,440	346	19,786	21,069	817	30,718	1,169	1,602	33,489	34,306	83b
1,989	14,238	570	14,808	16,797	614	19,775	899	704	21,378	21,992	83c
580	8,604	74	8,678	9,258	393	4,735	97	131	4,963	5,356	83d
.....	.....	.....	.....	.....	.....	23	.....	.....	23	23	84a
2,076	36,789	11,225	48,014	50,090	1,961	35,933	9,335	2,484	47,752	49,713	84b
229	2,443	304	2,747	2,976	635	1,945	246	107	2,298	2,933	85a
18	447	3	450	468	12	430	13	47	490	502	85b
562	11,732	462	12,194	12,756	874	7,494	965	612	9,071	9,945	85c
.....	.....	.....	.....	.....	.....	107	.....	.....	107	107	85d
.....	96	.....	96	96	.....	.....	.....	.....	.....	.....	85e
372	6,250	314	6,564	6,936	632	16,143	1,234	1,335	18,712	19,344	85f
425	1,144	41	1,185	1,610	7	906	31	15	952	959	85g
1	303	12	315	316	17	429	210	37	676	693	85h
22,079	247,540	24,902	272,442	294,521	35,495	535,501	62,701	43,142	641,347	676,842	89–90
5,148	87,500	14,266	101,766	106,914	9,340	194,163	41,924	17,649	253,736	263,076	91
2,067	65,804	27,697	93,501	95,568	7,101	155,479	71,669	13,295	240,443	247,544	92a
755	7,219	1,940	9,159	9,914	830	8,605	2,460	2,774	13,839	14,669	92b
1,981	82,099	7,302	89,401	91,382	1,914	39,623	5,805	1,952	47,380	49,294	93a
1,318	24,569	3,482	28,051	29,369	2,195	65,372	8,475	2,234	76,081	78,276	93b
3,020	40,272	4,877	45,149	48,169	1,863	55,137	11,606	3,635	70,378	72,241	93c
1,715	15,917	2,018	17,935	19,650	1,258	21,637	4,436	1,415	27,488	28,746	96
122	880	93	973	1,095	69	1,814	192	94	2,100	2,169	97
1,015	2,129	167	2,296	3,311	36	1,349	215	796	2,360	2,396	98
793	3,065	274	3,339	4,132	978	13,315	304	575	14,194	15,172	99a
158	482	16	498	656	.....	228	8	44	280	280	99b
1,413	11,405	1,360	12,765	14,178	2,717	28,101	2,081	2,105	32,287	35,004	99c
.....	638	20	658	658	.....	332	.....	.....	332	332	101
1,561	7,274	232	7,506	9,067	1,845	9,379	614	383	10,376	12,221	102a
994	2,894	26	2,920	3,914	147	3,542	181	189	3,912	4,059	102b
4,123	43,367	2,666	46,033	50,156	5,251	68,753	5,465	4,854	79,072	84,323	102c
2,193	5,764	145	5,909	8,102	1,280	5,273	273	281	5,827	7,107	105a
407	2,443	257	2,700	3,107	461	11,208	734	2,419	14,361	14,822	105b
3,060	19,461	1,074	20,535	23,595	4,033	79,518	5,282	7,329	92,129	96,162	105c
29	4,535	394	4,929	4,958	4	1,819	18	307	2,144	2,148	106
.....	165	440	605	605	5	194	20	16	230	235	107a
252	702	22	724	976	68	2,097	74	185	2,356	2,424	107b
14	572	28	600	614	132	342	34	6	382	514	107c
12,016	105,216	6,140	111,356	123,372	11,737	184,871	12,420	12,253	209,544	221,281	108
20,368	169,615	5,594	175,209	195,577	9,311	200,099	13,374	8,526	221,999	231,310	109a
476	1,594	126	1,720	2,196	169	1,883	154	57	2,094	2,263	109b

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XI. CIRCULATORY SYSTEM, DISEASES OF—continued.						
81c	Aortitis						
81d	Arteries, other diseases of	5				94	
82	Embolism and thrombosis	18					
83a	Hemorrhoids	258	675	190	865	147	476
83b	Varicocele	141	467	101	568	432	401
83c	Varicose veins	297	9		9	234	101
83d	Phlebitis					11	60
84a	Status lymphaticus						
84b	Lymphatic system, other diseases of	51	295	322	617	115	1,779
85a	Cardiac arrhythmias	60	56	29	85		
85b	Cardiac murmurs, not organic	127				9	1
85c	Cardiac disorders, functional		237	4	241	136	5
85d	Bradycardia		13		13		
85e	Heart block						
85f	Tachycardia	25	3	5	8	418	16
85g	Hemorrhage						
85h	Circulatory system, other diseases of	5	2		2		
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89–90	Bronchitis	1,685	1,458	191	1,649	2,537	1,102
91	Pneumonia, broncho	151	100	87	187	30	24
92a	Pneumonia, lobar	215	418	119	537	378	23
92b	Pneumonia, unclassified						
93a	Pleurisy, suppurative	1		319	319		
93b	Pleurisy, serofibrinous	8	257	172	429		71
93c	Pleura, other diseases of	97	316	88	404	109	109
96	Asthma	192	4	127	131	245	313
97	Pulmonary emphysema						72
98	Lungs, other diseases of	30	299	3	302		
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99a	Pyorrhea alveolaris	6	66		66	1	30
99b	Abscess periapical, focal infection from						
99c	Mouth and adnexa, other diseases of	59	441	14	455	77	60
101	Esophagus, diseases of						
102a	Ulcer of the stomach	58	21	64	85	164	
102b	Gastro-enteroptosis	27					
102c	Stomach, other diseases of	205	501	234	735	894	362
105a	Duodenal ulcer					140	109
105b	Diarrhea	141	170	85	255	43	39
105c	Enteritis and colitis	135	443	43	486	103	132
106	Ankylostomiasis (uncinariasis, hookworm)		36	43	79		8
107a	Ascaris lumbricoides		15	113	128		
107b	Cestodes	8		15	15	17	
107c	Intestinal parasites, others	30	116	24	140		25
108	Appendicitis (all)	911	1,431	1,647	3,078	2,170	1,859
109a	Hernia	271	1,086	73	1,159	570	
109b	Intestinal obstruction		40		40	44	373

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
									81c
									81d
									82
2,026		2,026	53	18	71	226	131	18	83a
602	8	610	83	2	85	124	22	61	83b
1,512		1,512	17		17	86	3	44	83c
77		77	85		85				83d
									84a
1,072	82	1,154	251	86	337	533	30	915	84b
119		119				9			85a
65		65						4	85b
108		108	102		102				85c
			8		8	20			85d
						3	21		85e
204		204	20		20			88	85f
5		5				4		7	85g
						7			85h
11,299	67	11,366	2,035	143	2,178	2.591	120	1,870	89–90
1,958	76	2,034	1,895	692	2,587	227		202	91
3,647	7	3,654	1,696	495	2,191	1,072	415	122	92a
225		225	9		9				92b
567		567	150	96	246	211			93a
1,339		1,339	387		387	109		230	93b
950	11	961	473	101	574	220	5	25	93c
381	101	482	82	73	155	267	52	236	96
									97
						24			98
1,571		1,571	19		19			19	99a
									99b
1,060	10	1,070	97		97	113	41	189	99c
									101
296		296	25	49	74		196	36	102a
49		49							102b
1,821		1,821	233	2	235	774	257	174	102c
									105a
2,738		2,738	128		128	263	48	7	105b
2,235	5	2,240	282	49	331	290	7	233	105c
						783		751	106
3		3				870		6	107a
16		16				42			107b
						189		128	107c
8,473		8,473	1,326	80	1,406	281	1,032	156	108
5,223	110	5,333	374	51	425	190	106	528	109a
84		84	3		3	5	1		109b

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XIII. DIGESTIVE SYSTEM, DISEASES OF—contd.								
110a	Fistula in ano	42,862	42,821	1,686	35,582	4,348	1,205	41,135	41
110b	Intestines, other diseases of	111,943	108,561	10,866	85,255	10,392	2,048	97,695	3,382
113	Cirrhosis of the liver	2,126	1,937	401	1,285	251	.....	1,536	189
114	Cholelithiasis	3,956	3,913	1,220	2,402	186	105	2,693	43
115a	Cholecystitis	29,670	29,620	4,631	23,106	1,059	824	24,989	50
115b	Gall bladder and bile duct, other diseases of.	27,533	27,386	2,487	22,237	1,535	1,127	24,899	147
115c	Liver, other diseases of	4,655	4,583	390	3,842	313	38	4,193	72
117b	Peritoneal adhesions	22,835	22,780	1,763	19,036	1,347	634	21,017	55
118a	Pancreatitis	398	398	1	397	.....	.....	397	.....
118b	Visceroptosis	1,794	1,790	141	1,621	28	.....	1,649	4
118c	Digestive system, other diseases of.	3,160	3,146	207	3,475	146	318	2,939	14
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).								
119	Nephritis, acute	38,417	38,365	2,733	31,595	1,272	2,765	35,632	52
120	Nephritis, chronic	113,298	113,113	6,898	96,969	6,418	2,828	106,215	185
122a	Abscess perinephritic	1,560	1,560	142	1,408	.....	10	1,418	.....
122b	Nephroptosis	1,369	1,369	115	1,150	17	87	1,254	.....
122c	Hydronephrosis	1,641	1,607	351	1,256	.....	.....	1,256	34
122d	Pyogenic infection of the kidneys.	16,378	16,378	2,009	13,381	732	256	14,369	.....
122e	Kidney and annexa, other diseases of.	9,777	9,755	1,483	6,445	1,532	295	8,272	22
123	Nephrolithiasis	19,770	19,770	2,918	15,541	740	571	16,852	.....
124a	Cystitis	26,545	26,426	2,874	20,593	2,303	656	23,552	119
124b	Bladder, other diseases of	7,542	7,538	28	6,009	977	524	7,510	4
125a	Urethritis (nonvenereal)	21,553	21,473	1,544	16,818	2,625	486	19,929	80
125b	Stricture (nonvenereal)	5,687	5,681	256	4,419	644	362	5,425	6
125c	Urethra, other diseases of	1,075	1,075	160	876	39	.....	915	.....
126	Prostate, diseases of	7,503	7,503	1,702	5,424	270	107	5,801	.....
127a	Balantis	7,529	7,504	450	5,799	1,086	169	7,054	25
127b	Epididymitis (nonvenereal).	17,052	16,942	924	13,851	1,371	796	16,018	110
127c	Hydrocele	19,561	19,274	963	16,503	1,614	194	18,311	287
127d	Warts, external genital organs.	6,340	6,327	143	5,280	673	231	6,184	13
127e	Genito-urinary system, other diseases of (nonvenereal).	29,116	28,846	1,170	22,484	3,525	1,667	27,676	270
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.								
142	Gangrene	1,635	1,623	280	699	592	52	1,343	12
143a	Carbuncle	12,719	12,592	1,230	10,588	361	413	11,362	127
143b	Furuncle	59,079	57,946	2,311	52,133	1,525	1,977	55,635	1,133
144a	Abscess	71,968	70,264	2,837	57,304	7,734	2,389	67,429	1,704
144b	Cellulitis	51,973	50,940	2,155	44,911	2,393	1,481	48,785	1,033
145a	Trichophytoses	18,553	17,278	412	15,703	979	184	16,866	1,275
145b	Nails, defects and diseases of.	25,976	25,630	648	23,886	421	675	24,982	346
145c	Ectoparasites	4,140	4,094	54	3,755	157	128	4,040	46
145d	Clavus	.....	.....	.....	.....	.....	.....	.....	.....
145e	Dermatitis	4,180	4,072	404	3,254	160	254	3,668	108
145f	Eczema	36,943	36,609	2,506	32,010	1,255	838	34,103	334

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
.....	15,101	1,704	16,805	16,805	1,686	19,768	2,632	1,205	23,605	25,291	110a
8,467	44,823	5,415	50,238	58,705	2,191	33,573	4,377	2,033	39,983	42,177	110b
10	565	25	590	600	391	702	226	.....	928	1,319	113
381	1,058	.....	1,058	1,439	839	1,270	165	105	1,540	2,379	114
2,060	7,622	333	7,955	10,015	2,554	14,892	696	824	16,412	18,966	115a
833	7,229	554	7,783	8,616	1,631	14,499	964	1,127	16,590	18,221	115b
194	2,447	115	2,562	2,756	116	1,068	198	38	1,304	1,420	115c
741	5,725	261	5,986	6,727	1,020	12,242	1,051	634	13,927	14,947	117b
1	67	.....	67	68	.....	330	.....	.....	330	330	118a
57	905	28	933	990	84	692	.....	.....	692	776	118b
99	978	13	991	1,090	41	1,457	130	318	1,905	1,946	118c
958	6,722	326	7,048	8,006	1,744	24,462	843	2,765	28,070	29,814	119
3,093	22,525	1,181	23,706	26,799	3,242	73,349	5,223	2,828	81,400	84,642	120
98	694	.....	694	792	9	575	.....	10	585	594	122a
115	430	.....	430	545	.....	652	17	87	756	756	122b
351	966	.....	966	1,317	.....	290	.....	.....	290	290	122c
927	6,840	286	7,126	8,053	1,082	5,945	136	256	6,337	7,419	122d
932	2,882	685	3,567	4,499	524	3,319	847	295	4,461	4,985	122e
1,245	6,297	42	6,339	7,584	1,481	8,455	698	571	9,724	11,205	123
801	8,356	813	9,169	9,970	1,913	11,740	1,472	656	13,868	15,781	124a
26	1,625	392	2,017	2,043	2	4,327	585	524	5,436	5,438	124b
647	9,012	1,819	10,831	11,478	897	7,407	806	486	8,699	9,596	125a
246	1,385	209	1,594	1,840	10	3,034	409	362	3,805	3,815	125b
151	60	39	99	250	9	777	.....	.....	777	786	125c
950	2,270	114	2,384	3,334	752	3,124	133	107	3,364	4,116	126
152	3,079	753	3,832	3,984	278	2,527	315	169	3,011	3,289	127a
299	5,816	677	6,493	6,792	593	7,825	663	796	9,284	9,877	127b
490	7,073	708	7,781	8,271	463	9,063	906	194	10,163	10,626	127c
81	3,532	439	3,971	4,052	62	1,702	136	231	2,069	2,131	127d
434	8,183	1,268	9,451	9,885	677	13,471	2,220	1,667	17,358	18,035	127e
280	396	365	761	1,041	.....	303	227	52	582	582	142
553	5,186	57	5,243	5,796	677	5,155	304	413	5,872	6,549	143a
1,343	23,468	710	24,178	25,521	926	26,453	662	1,945	29,060	29,986	143b
1,354	27,656	3,184	30,840	32,194	1,351	26,811	4,479	2,361	33,651	35,002	144a
1,496	18,585	1,298	19,883	21,379	638	24,382	1,039	1,459	26,880	27,518	144b
306	9,811	253	10,064	10,370	101	4,276	466	165	4,907	5,008	145a
291	12,952	172	13,124	13,415	294	9,512	237	675	10,424	10,718	145b
23	1,767	49	1,816	1,839	31	1,889	108	128	2,125	2,156	145c
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145d
179	1,541	51	1,592	1,771	214	1,205	106	254	1,565	1,779	145e
1,440	12,447	688	13,135	14,575	5,310	18,410	567	838	19,815	20,850	145f

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XIII. DIGESTIVE SYSTEM, DISEASES OF—contd.						
110a	Fistula in ano		108	12	120	58	111
110b	Intestines, other diseases of	205	2,125	502	2,627	845	1,138
113	Cirrhosis of the liver						
114	Cholelithiasis		5		5	61	
115a	Cholecystitis	17	157	20	177	145	19
115b	Gall bladder and bile duct, other diseases of.	23	84	17	101	26	6
115c	Liver, other diseases of	80	55		55		122
117b	Peritoneal adhesions	2	87	35	122	302	105
118a	Pancreatitis						
118b	Visceroptosis						
118c	Digestive system, other diseases of.	67	6		6	23	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NON-VENEREAL).						
119	Nephritis, acute	31	39	16	55		
120	Nephritis, chronic	563	96	14	110	451	329
122a	Abscess perinephritic	35					
122b	Nephroptosis						
122c	Hydronephrosis						
122d	Pyogenic infection of the kidneys.		4	310	314	263	43
122e	Kidney and adnexa, other diseases of.	27	39		39	65	22
123	Nephrolithiasis	192	111		111	253	55
124a	Cystitis	160	33	18	51	58	236
124b	Bladder, other diseases of					18	
125a	Urethritis (nonvenereal)		30		30	148	75
125b	Stricture (nonvenereal)			7	7		
125c	Urethra, other diseases of		21		21		3
126	Prostate, diseases of			23	23		
127a	Balanitis	20	69	18	87	57	5
127b	Epididymitis (nonvenereal).	32	71	31	102	2	11
127c	Hydrocele	10	21		21	202	36
127d	Warts, external genital organs.			98	98	26	
127e	Genito-urinary system, other diseases of (nonvenereal).	59	29	22	51	39	11
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.						
142	Gangrene						
143a	Carbuncle		2		2	67	9
143b	Furuncle	42	421	153	574	263	377
144a	Abscess	132	215	62	277	323	404
144b	Cellulitis	21	474	50	524	224	506
145a	Trichophytoses	5	502	260	762	448	555
145b	Nails, defects and diseases of.	63	153	12	165	406	423
145c	Ectoparasites		10		10		3
145d	Clavus						
145e	Dermatitis	11	23	3	26	10	164
145f	Eczema	31	187		187	147	273

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
417		417	19		19	19		22	110a
2,460	15	2,475	291	98	389	2,406	128	848	110b
			18		18	50	15	124	113
8		8		21	21	30		13	114
260		260	11	10	21		1	49	115a
321		321	72		72	56		91	115b
150		150				26		46	115c
554		554	21		21	55			117b
									118a
24		24						4	118b
			11	3	14	9		5	118c
251		251	121	87	208	52			119
169		169	50		50	23	68	94	120
102		102	37		37				122a
68		68							122b
						34			122c
286		286							122d
10		10	108		108	19		3	122e
230		230	140		140				123
142		142	28		28	97	6	16	124a
27		27	12		12	4			124b
136		136	10		10	17	63		125a
				19	19	6			125b
15		15							125c
3		3	27		27				126
50		50	12		12	16	9		127a
107		107	19		19	12	39	59	127b
106		106	2		2		5	282	127c
20		20				13			127d
408		408	343	15	358	146	4	120	127e
						12			142
125		125	44		44	119		8	143a
1,044	32	1,076	107		107	947	13	173	143b
1,624	28	1,652	271	9	280	959	283	462	144a
515	22	537	225	6	231	728	67	238	144b
111	19	130				1,194	30	51	145a
440		440				237	32	77	145b
83		83	3		3	46			145c
									145d
310		310	1		1	29	79		145e
368		368	178		178	272	38	24	145f

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XV. SKIN AND CELLULAR TISSUES, DISEASES OF—con.								
145g	Erythema	5,940	5,920	170	5,052	449	249	5,750	20
145h	Herpes	12,949	12,837	757	10,375	1,227	478	12,080	112
145i	Impetigo	16,752	16,685	777	14,668	434	806	15,908	67
145j	Lichen	618	618	8	472	21	117	610	.....
145k	Nævus	840	840	14	817	2	7	826	.....
145l	Pityriasis	2,726	2,726	129	2,497	59	41	2,597	.....
145m	Psoriasis	19,819	19,704	1,054	17,709	443	498	18,650	115
145n	Scabies	162,727	162,366	10,423	139,386	3,490	9,067	151,943	361
145o	Skin and cellular tissue, other diseases of.	95,941	95,090	4,540	79,155	7,010	4,385	90,550	851
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.								
146a	Osteomyelitis	25,757	25,710	930	21,236	3,201	343	24,780	47
146b	Fractures, faulty union of.	17,337	17,154	37	15,221	878	1,018	17,117	183
146c	Bones, other diseases of	24,919	24,628	1,774	19,803	2,028	1,023	22,854	291
147a	Ankylosis of joint	12,362	12,359	618	11,152	391	198	11,741	3
147b	Loose bodies in joint	524	524	85	435	4	.....	439	.....
147c	Synovitis	16,486	16,430	1,961	12,320	1,496	653	14,469	56
147d	Floating cartilage	1,937	1,937	199	1,536	163	39	1,738	.....
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).	8,026	,999	238	7,174	280	307	7,761	27
149a	Hallux valgus	11,394	11,289	317	9,567	1,186	219	10,972	105
149b	Hammertoe	5,660	5,660	253	5,250	113	44	5,407	.....
149c	Metatarsalgia	5,380	5,380	437	4,422	262	259	4,943	.....
149d	Myositis	25,099	24,973	1,135	20,350	2,814	674	23,838	126
149e	Pes planus	170,531	170,294	3,338	151,542	10,356	5,058	166,956	237
149f	Talipes	1,977	1,977	.....	1,870	23	84	1,977	.....
149g	Tenosynovitis	6,710	6,680	586	5,558	167	369	6,094	30
149h	Organs of locomotion, other diseases of.	110,328	109,951	4,641	89,977	10,214	5,119	105,310	377
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.								
150	Congenital malformations	8,404	8,351	528	6,980	404	439	7,823	53
189	Not specified or ill-defined diseases.	444,308	442,029	18,041	354,401	59,254	10,333	423,988	2,279
	Total for diseases	16,319,604	16,234,453	862,212	13,147,566	1,697,440	527,235	15,372,241	85,151
Office Classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.								
1	Bites	3,609	3,566	39	2,836	500	191	3,527	43
2	Burns	44,304	44,081	2,821	35,019	3,726	2,515	41,260	223
3	Burns, chemical and X-ray	10,827	10,814	576	8,987	1,071	180	10,238	13
4	Compression (brain)	84	84	.....	84	.....	.....	84	.....
5	Concussion (brain)	11,022	10,964	2,444	7,552	218	750	8,520	58
6	Contusion	141,137	139,953	7,595	112,341	12,261	7,756	132,358	1,184
7	Crushing	33,185	33,172	1,038	29,359	2,146	629	32,134	13
8	Dermatitis from traumatism.	3,886	3,860	750	2,735	261	114	3,110	26
9	Dislocation of joint	48,410	47,836	4,197	39,254	2,814	1,571	43,639	574
10	Dislocation, articular, cartilage of knee.	25,696	25,586	3,259	20,941	506	880	22,327	110

TABLE XIX.—*Days lost, United Stases Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
117	2,868	262	3,130	3,247	53	2,046	187	249	2,482	2,535	145g
301	5,172	491	5,663	5,964	442	4,756	732	478	5,966	6,408	145h
255	5,649	206	5,855	6,110	506	8,614	228	806	9,648	10,154	145i
8	175	21	196	204	.....	292	.....	117	409	409	145j
14	547	2	549	563	.....	121	.....	7	128	128	145k
91	1,156	4	1,160	1,251	38	1,172	55	41	1,268	1,306	145l
408	4,522	208	4,730	5,138	634	13,039	235	498	13,772	14,406	145m
4,814	54,182	712	54,894	59,708	5,534	83,169	2,778	9,051	94,998	100,532	145n
2,165	33,074	3,766	36,840	39,005	2,284	41,902	3,082	4,385	49,369	51,653	145o
612	11,216	2,497	13,713	14,325	318	9,729	704	343	10,776	11,094	146a
32	5,120	255	5,375	5,407	5	9,380	623	1,018	11,021	11,026	146b
1,039	7,936	382	8,378	9,357	735	11,359	1,589	1,023	13,971	14,706	146c
583	6,143	218	6,361	6,944	35	4,539	169	198	4,906	4,941	147a
63	135	4	139	202	22	300	.....	.....	300	322	147b
836	4,619	535	5,154	5,990	1,013	7,257	961	653	8,871	9,884	147c
62	474	160	634	696	137	940	3	39	982	1,119	147d
109	3,117	44	3,161	3,270	129	3,488	236	307	4,031	4,160	147e
189	3,136	208	3,344	3,533	128	6,253	978	219	7,450	7,578	149a
75	2,185	1	2,186	2,261	178	2,891	112	44	3,047	3,225	149b
199	1,753	125	1,878	2,077	238	2,524	137	259	2,920	3,158	149c
582	4,569	453	5,022	5,604	550	14,309	2,349	674	17,332	17,882	149d
1,128	47,985	2,677	50,662	51,790	2,054	96,057	7,679	5,014	108,750	110,804	149e
.....	1,338	23	1,361	1,361	.....	478	.....	84	562	562	149f
333	2,201	128	2,329	2,662	193	3,167	39	369	3,575	3,768	149g
2,324	35,878	3,585	39,463	41,787	2,257	50,505	6,562	5,117	62,184	64,441	149h
389	2,520	112	2,632	3,021	136	4,384	292	439	5,115	5,251	150
10,398	238,995	44,580	283,575	293,973	6,864	105,287	13,756	10,264	129,307	136,171	189
467,251	5,700,890	778,999	6,479,889	6,947,140	376,768	7,017,592	894,588	524,931	8,437,111	8,813,879	
									5		Office Classification.
7	933	41	974	981	32	1,790	454	191	2,439	2,467	1
840	11,273	1,368	12,641	13,481	1,981	22,635	2,343	2,511	27,483	29,470	2
202	4,370	820	5,190	5,392	374	4,223	230	180	4,63	5,007	3
.....	.....	.....	.....	.....	.....	84	.....	.....	84	84	4
1,036	2,637	29	2,666	3,702	1,388	4,806	178	750	5,734	7,122	5
2,899	39,012	3,705	42,717	45,616	4,521	70,273	8,284	7,731	86,288	90,809	6
370	6,702	381	7,083	7,453	668	22,013	1,765	629	24,407	25,075	7
501	.....	.....	.....	501	249	2,310	241	114	2,665	2,914	8
2,109	12,413	541	12,954	15,063	1,734	25,834	2,106	1,571	29,511	31,245	9
960	5,956	93	6,049	7,009	2,299	14,039	413	880	15,332	17,631	10

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF—continued.						
145g	Erythema		2		2	21	6
145h	Herpes	14	126	4	130	51	41
145i	Impetigo	16	15		15	86	131
145j	Lichen						
145k	Nævus		25		25		
145l	Pityriasis		15		15	19	1
145m	Psoriasis	12					116
145n	Scabies	75	134		134		98
145o	Skin and cellular tissue, other diseases of.	91	610	162	772	674	1,102
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis		134		134	62	12
146b	Fractures, faulty union of		30		30	145	
146c	Bones, other diseases of		37	57	94	369	58
147a	Ankylosis of joint			4	4	224	
147b	Loose bodies in joint						
147c	Synovitis	112	243		243	25	
147d	Floating cartilage						
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).		212		212	67	46
149a	Hallux valgus		75		75		13
149b	Hammertoe					117	26
149c	Metatarsalgia						4
149d	Myositis	3	31	12	43		
149e	Pes planus	156	1,076		1,076	1,595	333
149f	Talipes		44		44		
149g	Tenosynovitis	60				62	
149h	Organs of locomotion, other diseases of.	60	293	67	360	684	148
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.						
15	Congenital malformations	3	8		8	18	27
180 9	Not specified or ill-defined diseases.	779	1,408	735	2,143	1,453	1,413
	Total for diseases	18,193	57,749	19,779	77,528	38,501	41,633
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
1	Bites		10	5	15	18	9
2	Burns		51	15	66	139	133
3	Burns, chemical and X-ray		95	21	116	25	136
4	Compression (brain)						
5	Concussion (brain)	20				96	
6	Contusion	175	452	244	696	904	471
7	Crushing					242	
8	Dermatitis from traumatism.		104	20	124	133	97
9	Dislocation of joint	354	114	151	265	64	113
10	Dislocation, articular, cartilage of knee.					19	96

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	
Other countries and not stated.			Transports.						
White.	Color not stated.	Total.	White.	Colored.	Total.	Philippine Scouts.	Hawaiians.	Porto Ricans.	
77		77	32		32	20			145g
204		204	25		25	71	17	24	145h
160		160	13		13	11	56		145i
			5		5				145j
124		124							145k
134		134							145l
32		32				115			145m
1,289	16	1,305	514		514	145	201	15	145n
1,667		1,667	126		126	550	165	136	145o
83		83					47		146a
526		526	20		20		183		146b
25		25	19		19	180	107	4	146c
246		246				3			147a
									147b
154		154	22		22	56			147c
122		122							147d
204		204	40		40		23	4	147e
90		90				103		2	149a
31		31							149b
141		141							149c
1,231		1,231	210		210	80	8	38	149d
3,982	44	4,026	514		514		232	5	149e
10		10							149f
117		117	11		11	16	14		149g
2,319	2	2,321	150		150	272	57	48	149h
23		23				23		30	150
4,024	69	4,093	1,821	183	2,004	1,490	313	476	189
249,173	2,304	251,477	42,028	4,074	46,102	49,812	12,633	22,706	
									Office classification.
57		57	19		19	36		7	1
602	4	606	186		186	181	30	12	2
137		137	1		1			13	3
									4
12		12	1	11	12	10	42	6	5
596	25	621	633	28	661	736	192	256	6
186		186	216		216		13		7
85		85	6		6	26			8
373		373	343	16	359	405	74	95	9
772		772	59		59			110	10

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.	Traumatisms.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No. strength	936,924	12,659
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES—continued.								
11	Drowning (except suicides).	2	2			2		2	
12	Epiphyseal separation	1,407	1,407	352	976		79	1,055	
13	Eye and annexa, traumatisms.	11,632	11,591	349	8,967	1,693	582	11,242	41
14	Foreign bodies	9,312	9,232	131	7,227	1,401	473	9,101	80
15	Fracture, simple	794,963	791,445	59,972	666,023	41,729	23,721	731,473	3,518
16	Fracture, compound	298,651	297,791	19,649	248,096	21,034	9,012	278,142	860
17	Fracture, faulty union	1,554	1,554	162	1,028	229	137	1,392	
18	Gases deleterious, absorption of.	5,734	5,733	328	4,067	832	506	5,405	
19	Gunshot wound								
20	Hemorrhage and results	2,479	2,396	205	2,126	64	1	2,191	83
21	Homicides	42	42		22	20		42	
22	Poisoning by food	2,579	2,575	146	2,264	90	75	2,429	4
23	Poisoning, other acute	3,473	3,408	155	2,849	315	89	3,253	65
24	Secondary result of injury	20,896	20,890	1,862	16,688	1,652	688	19,028	6
25	Sprain of joint	230,948	229,650	13,730	192,940	13,510	9,470	215,920	1,298
26	Strain	35,009	34,901	1,417	28,923	2,463	2,098	33,484	108
27	Suicide	140	124	18	102		4	106	16
28	Synovitis, traumatic, cause undetermined.	39,598	39,584	3,368	32,212	2,612	1,392	36,216	14
29	Venomous bites and stings	2,487	2,405	125	2,052	118	110	2,280	82
30	Wounds, multiple	61,027	60,989	4,877	48,990	4,471	2,651	56,112	38
31	Wounds, penetrating	68,516	68,448	2,310	54,978	6,265	4,895	66,138	68
33	Wounds, perforating	27,141	27,141	1,078	22,669	1,947	1,447	26,063	
34	Wounds, others	289,851	286,592	9,586	238,378	26,402	12,226	277,006	3,259
35	Traumatisms, others	116,332	115,250	7,640	93,446	9,344	4,820	107,610	1,082
	Total for diseases	16,319,604	16,234,453	862,212	13,147,566	1,697,440	527,235	15,372,241	85,151
	Total for external causes.	2,345,933	2,333,066	150,179	1,934,131	159,696	89,060	2,182,887	12,867
	Grand total	18,665,537	18,567,519	102,391	15,081,697	1,857,136	616,295	17,555,128	98,018
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.								
1	Knife	20,608	20,414	877	16,940	2,548	49	19,537	194
2	Pistol ball	58,103	57,974	2,119	48,570	5,640	1,645	55,855	129
3	Rifle ball	81,437	81,379	1,273	69,939	6,526	3,641	80,106	58
4	Shotgun	5,687	5,687	121	5,178	335	53	5,566	
5	Cutting and piercing instruments (other).	68,278	67,270	1,936	55,588	6,937	1,809	65,334	1,008
6	Other military agents	105,471	105,364	5,634	82,347	7,272	10,111	99,730	107
7	Sinking ships	51	51		51			51	
8	Air machines	56,882	56,882	29,377	26,915	60	530	27,505	
9	Automobiles	153,191	152,682	12,700	131,419	5,193	3,370	139,982	509
10	Motorcycles	135,968	135,902	13,386	119,828	1,909	779	122,516	66
11	Railroad accidents	82,661	82,459	3,314	70,712	6,329	2,104	79,145	202
12	Street car accidents	10,210	10,098	680	8,918	280	220	9,418	112
13	Other vehicles	107,815	107,202	3,810	91,816	8,705	2,871	103,392	613
14	Animals	66,861	66,540	2,061	60,701	2,112	1,663	64,476	321
15	Conflagrations	334	334	92	237		5	242	
16	Crushing	88,297	87,979	5,011	73,607	7,685	1,676	82,968	318
17	Electricity	1,090	1,090	13	911	38	128	1,077	

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	Office classification No.
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
							2		2	2	11
127	543		543	670	225	337		79	416	641	12
56	2,662	283	2,945	3,001	293	5,838	1,395	582	7,815	8,108	13
37	2,750	286	3,036	3,073	15	4,187	1,115	473	5,775	5,790	14
23,965	200,406	11,411	211,817	235,782	34,987	446,762	29,807	23,492	500,061	535,048	15
6,947	65,054	4,903	69,957	76,904	12,157	175,152	15,784	8,971	199,907	212,064	16
162	429	40	469	631		599	189	135	923	923	17
171	1,205	5	1,210	1,381	157	2,859	827	506	4,192	4,349	18
											19
205	1,171	43	1,214	1,419		799	21	1	821	821	20
	5	1	6	6		17	19		36	36	21
62	1,431	19	1,450	1,512	83	476	47	75	598	681	22
98	1,173	40	1,213	1,311	57	1,607	275	89	1,971	2,028	23
888	7,709	414	8,123	9,011	909	7,504	896	688	9,088	9,997	24
5,909	63,978	4,892	68,870	74,779	7,718	120,353	8,072	9,417	137,842	145,560	25
758	11,621	659	12,280	13,038	657	15,839	1,796	2,042	19,677	20,334	26
1	90		90	91	17	12		4	16	33	27
1,353	9,550	713	10,263	11,616	2,015	21,216	1,899	1,392	24,507	26,522	28
32	899	18	917	949	93	990	5	108	1,103	1,196	29
2,790	14,091	692	14,783	17,573	2,087	33,734	3,777	2,651	40,162	42,249	30
634	11,317	1,343	12,660	13,294	1,674	41,567	4,922	4,713	51,202	52,876	31
618	5,019	842	5,861	6,479	432	16,667	1,038	1,443	19,148	19,580	33
4,957	96,540	9,192	105,732	110,689	4,532	129,410	16,007	12,139	157,556	162,088	34
3,173	34,730	2,073	36,803	39,976	4,340	49,965	6,727	4,743	61,435	65,775	35
467,251	5,700,890	778,999	6,479,889	6,947,140	376,768	7,017,592	894,588	524,931	8,437,111	8,813,879	
61,867	615,669	44,847	660,516	722,383	85,694	1,243,897	110,634	88,300	1,442,831	1,528,525	
529,118	6,316,559	823,846	7,140,405	7,669,523	462,462	8,261,489	1,005,222	613,231	9,879,942	10,342,404	
81	6,693	937	7,630	7,711	794	9,606	1,514	49	11,169	11,963	1
1,128	10,532	1,966	12,498	13,626	666	36,293	3,670	1,645	41,608	42,274	2
723	13,066	1,606	14,672	15,395	550	53,435	4,754	3,609	61,798	62,348	3
121	3,884	265	4,149	4,270		1,042	70	53	1,165	1,165	4
891	22,564	2,600	25,164	26,055	1,025	31,261	4,131	1,796	37,188	38,213	5
1,831	13,596	930	14,526	16,357	3,694	65,408	6,275	9,858	81,541	85,235	6
	2		2	2		23			23	23	7
13,580	14,019	2	14,021	27,601	15,531	12,586	58	530	13,168	28,699	8
6,668	51,360	5,531	53,891	60,559	6,025	78,301	2,650	3,370	84,321	90,346	9
4,034	32,527	808	33,335	37,369	9,349	86,017	1,092	779	87,888	97,237	10
895	14,743	1,282	16,025	16,920	2,419	53,922	5,004	2,104	61,030	63,449	11
525	5,719	189	5,908	6,433	155	3,119	91	220	3,430	3,585	12
897	20,892	2,009	22,901	23,798	2,903	69,672	6,574	2,871	79,117	82,020	13
801	27,222	1,194	28,416	29,217	1,260	31,976	654	1,663	34,293	35,553	14
	151		151	151	92	86		5	91	183	15
1,725	27,406	2,138	29,544	31,269	2,948	44,112	5,101	1,676	50,889	53,837	16
1	595		595	596	12	277	38	128	443	455	17

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification.	Traumatisms.	Officers other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES—continued.						
11	Drowning (except suicides)						
12	Epiphyseal separation					77	
13	Eye and annexa, traumatisms.		31	15	46	25	19
14	Foreign bodies	79	54		54	20	
15	Fracture, simple	1,020	1,120	214	1,334	2,826	2,953
16	Fracture, compound	545	401	193	594	1,385	630
17	Fracture, faulty union						
18	Gases deleterious, absorption of.						
19	Gunshot wound						
20	Hemorrhage and results		138		138		
21	Homicides						
22	Poisoning by food	1	330	24	354		20
23	Poisoning, other acute		23		23	17	25
24	Secondary result of injury.	65	251	292	543	142	131
25	Sprain of joint	103	890	388	1,278	1,611	917
26	Strain	2	150	8	158	191	222
27	Suicide						
28	Synovitis, traumatic, cause undetermined.		235		235	166	33
29	Venomous bites and stings		62	95	157	7	62
30	Wounds, multiple		135	2	137	7	148
31	Wounds, penetrating	2	96		96	17	54
33	Wounds, perforating	28	184		184	19	239
34	Wounds, others	97	1,355	1,118	2,473	1,764	3,112
35	Traumatisms, others	127	626	544	1,170	530	895
	Total for diseases	18,193	57,749	19,779	77,528	38,501	41,633
	Total for external causes.	2,618	6,907	3,349	10,256	10,444	10,506
	Grand total	20,811	64,656	23,128	87,784	48,945	52,139
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.						
1	Knife	2	54	97	151	274	185
2	Pistol ball	325	278	4	282	185	539
3	Rifle ball		78	12	90	41	206
4	Shotgun		194		194		
5	Cutting and piercing instrument (other).	20	403	153	556	472	752
6	Other military agents	109	127		127	17	493
7	Sinking ships					11	
8	Air machines	266				18	
9	Automobiles	7	144	12	156	709	555
10	Motorcycles	3	32	9	41	662	262
11	Railroad accidents		5	43	48	144	44
12	Street car accidents		40		40	40	
13	Other vehicles	10	72	122	194	215	181
14	Animals	3	119	264	383	493	340
15	Conflagrations						
16	Crushing	338	153	441	594	551	626
17	Electricity		36		36	3	

TABLE XIX.—*Days lost; United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,032	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
									11
19		19							12
390		390	11		11	13	2	26	13
141		141	75		75	51	29		14
6,893	229	7,122	5,063	297	5,360	1,222	1,052	1,244	15
4,656	41	4,697	818	154	972	326	238	296	16
									17
3		3				1			18
									19
4		4	14		14	63		20	20
									21
5		5	2		2	4			22
4		4				65			23
764		764	187	50	237	6			24
4,057	53	4,110	1,134	158	1,292	857	145	296	25
808	56	864	92		92	85		23	26
						1	15		27
901		901	111		111	5	2	7	28
32	2	34				51	21	10	29
774		774	101		101	1	2	35	30
1,686	182	1,868	241		241	38	30		31
511	4	515	30	67	97				33
4,589	87	4,676	1,608	85	1,693	2,431	165	663	34
6,331	77	6,408	369		369	681	294	197	35
249,173	2,304	251,477	42,028	4,074	46,102	49,812	12,633	22,706	
35,388	760	36,148	11,320	866	12,186	7,295	2,256	3,316	
284,561	3,064	287,625	53,348	4,940	58,288	57,107	14,889	26,022	
76		76	52		52	113	43	38	1
715		715	28		28	60		69	2
3,042	32	3,074	71	154	225	52	6		3
58		58							4
762	13	775	374	53	427	871	37	100	5
2,548	253	2,801	158	67	225	71	5	31	6
2		2	13		13				7
298		298							8
350		350				21	134	354	9
231		231	97		97	4	50	12	10
1,830		1,830	24		24	29	130	43	11
						109	3		12
784		784				161	120	332	13
532		532	19		19	281	12	28	14
									15
660		660	99	5	104	243	25	50	16
									17

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS.

Office classification No.	Traumatism.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No. strength	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total. officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.								
18	Fall	426,048	422,317	29,446	355,949	24,075	12,847	392,871	3,731
19	Falling objects	65,999	65,368	1,676	49,551	11,384	2,757	63,692	631
20	Splinters	4,413	4,285	27	3,568	557	133	4,258	128
21	Machinery	12,568	12,492	107	11,329	1,056		12,385	76
22	Other industrial agents	36,133	36,128	2,204	27,639	4,444	1,841	33,924	5
23	Excessive cold	10,059	10,059	131	7,781	1,163	984	9,928	
24	Excessive heat	6,058	6,017	91	5,101	665	160	5,926	4
25	Land or snow slides	75	75				75	75	1
26	Lightning	61	61		61			61	
27	Stones	4,831	4,743	177	2,842	1,487	237	4,566	88
28	Strangulation	1	1		1			1	
29	Jumping	17,709	17,672	802	15,447	907	516	16,870	37
30	Hot liquids	18,817	18,673	896	15,382	1,301	1,094	17,777	144
31	Fire, conflagrations excepted.	6,151	6,117	101	5,068	606	342	6,016	34
32	Poison	124	124		104	15	5	124	
33	Athletic exercises	221,165	219,987	10,093	191,701	11,807	6,386	209,894	1,178
34	Drilling and marching	16,783	16,197	1,275	13,792	842	288	14,922	586
35	Fighting (brawls)	20,263	20,177	5	16,202	2,811	1,159	20,172	86
36	Other external agents	435,731	433,266	20,741	347,936	35,007	29,582	412,525	2,465
	Total	2,345,933	2,333,066	150,179	1,934,131	159,696	89,060	2,182,887	12,867

The days lost shown above are shown under the diagnosis.

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						Office classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
12,879	109,363	6,297	115,660	128,539	15,892	226,765	17,160	12,846	256,771	272,663	18
695	16,809	1,786	18,595	19,290	981	30,421	9,583	2,757	42,761	43,742	19
27	1,936	374	2,310	2,337	.....	1,551	173	133	1,857	1,857	20
106	4,873	272	5,145	5,251	1	6,072	770	.....	6,842	6,843	21
859	4,365	757	5,122	5,981	1,265	22,886	3,687	1,841	28,414	29,679	22
9	1,218	80	1,298	1,307	122	3,040	1,083	863	4,986	5,108	23
70	2,312	426	2,738	2,808	21	2,269	238	160	2,667	2,688	24
.....	.....	.....	.....	.....	.....	.....	.....	75	75	75	25
.....	61	.....	61	61	.....	.....	.....	.....	.....	.....	26
16	619	237	856	872	161	2,118	1,230	237	3,585	3,746	27
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	28
416	4,761	192	4,953	5,369	386	10,129	673	512	11,314	11,700	29
388	5,033	463	5,496	5,884	508	9,891	830	1,090	11,811	12,319	30
.....	2,000	116	2,116	2,116	101	2,918	483	342	3,743	3,844	31
.....	71	.....	71	71	.....	33	15	5	53	53	32
4,193	69,641	5,282	74,923	79,116	5,697	116,339	6,335	6,383	129,057	134,754	33
768	5,338	271	5,609	6,377	495	8,061	170	288	8,519	9,014	34
5	5,598	1,018	6,616	6,621	.....	9,635	1,656	1,159	12,450	12,450	35
7,535	116,699	8,819	125,518	133,053	12,641	214,639	24,872	29,253	268,764	281,405	36
61,867	615,669	44,847	660,516	722,383	85,694	1,243,897	110,634	88,300	1,442,831	1,528,525	

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification No.			American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	Traumatisms.	Officers other countries.	Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL—contd.						
18	Fall	675	1,320	414	1,734	2,462	2,234
19	Falling objects		194	1	195	285	165
20	Splinters			10	10	58	11
21	Machinery			6	6	138	188
22	Other industrial agents	80	111		111	87	81
23	Excessive cold						
24	Excessive heat		35	1	36	16	32
25	Land or snow slides						
26	Lightning						
27	Stones			20	20	43	45
28	Strangulation						
29	Jumping		1	22	23	212	51
30	Hot liquids		28	8	36	62	47
31	Fire, conflagrations, except.		11	7	18	62	41
32	Poison						
33	Athletic exercises	203	1,070	101	1,171	1,104	838
34	Drilling and marching	12	13	277	290	147	50
35	Fighting (brawls)		102	137	239	64	292
36	Other external agents	565	2,287	1,188	3,475	1,869	2,248
	Total	2,618	6,907	3,349	10,256	10,444	10,506

The days lost shown above are shown under the diagnosis.

TABLE XIX.—*Days lost, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification No.
10,082	No strength.	10,082	53,280	6,298	59,728	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
7,332	1	7,333	6,473	204	6,677	1,962	826	943	18
830		830	847	14	861	375	44	212	19
12		12				7	115	6	20
9		9	49	8	57		32	44	21
100		100	9		9	3		2	22
3,523	121	3,644							23
334		334	103		103	23	12	6	24
									25
									26
17		17				70	15	3	27
									28
109	4	113	184	20	204	37			29
233	4	237	88		88	121	18	5	30
11		11	25		25	32		2	31
									32
2,327	3	2,330	382	89	471	363	295	520	33
183		183		124	124	572	3	11	34
371		371	140		140	70	9	7	35
8,109	329	8,438	2,085	128	2,213	1,645	322	498	36
35,388	760	36,148	11,320	866	12,186	7,295	2,256	3,316	

TABLE XX.—*Days lost, United States Army, 1919.*

NONEFFECTIVE RATES PER 1,000.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).							
1	Typhoid fever	0.13	0.13	0.14	0.13	0.03	0.13	0.00
3	Relapsing fever	.00	.00	.....	.00	.....	.00	.....
4	Malarial fevers (all)	.09	.08	.08	.08	.11	.08	1.13
4a	Malarial fever, estivo-autumnal	.01	.01	.01	.01	.01	.01	.24
4b	Malarial fever, mixed	.00	.00	.00	.00	.00	.00	.02
4c	Malarial fever, quartan	.01	.01	.00	.00	.05	.01	.00
4d	Malarial fever, tertian	.07	.05	.05	.06	.04	.06	.87
4e	Malarial fever, unclassified	.01	.01	.01	.01	.00	.01	.01
5	Smallpox	.01	.01	.00	.01	.02	.01	.01
6	Measles (all)	.23	.23	.03	.24	.19	.24	.06
7	Scarlet fever	.20	.20	.06	.23	.01	.21	.00
8	Whooping cough	.00	.00	.00	.00	.....	.00	.....
9	Diphtheria and results	.20	.20	.13	.21	.04	.21	.00
10	Influenza (all)	3.99	4.03	3.14	3.76	4.17	4.08	.82
12	Asiatic cholera	.00	.00	.....	.00	.....	.00	.01
14	Dysentery (all)	.06	.06	.18	.05	.03	.05	.39
14a	Dysentery, bacillary	.00	.00	.01	.00	.00	.00	.01
14b	Dysentery, balantidic	.00	.....	.....	.....	.....	.....	.01
14c	Dysentery, entamœbic	.03	.03	.14	.02	.02	.02	.13
14d	Dysentery (other protozoa)	.00	.00	.....	.00	.....	.00	.....
14e	Dysentery, unclassified	.03	.03	.03	.02	.01	.03	.15
17	Leprosy	.00	.00	.....	.00	.....	.00	.04
18	Erysipelas	.03	.03	.04	.03	.03	.03	.....
19a	Carrier, bacillus, diphtheria	.09	.09	.02	.10	.02	.10	.00
19b	Carrier, bacillus, typhoid	.00	.00	.00	.00	.....	.00	.....
19c	Carrier, meningococcus	.04	.04	.01	.04	.01	.04	.....
19d	Carrier epidemic diseases, others	.01	.01	.00	.01	.00	.01	.04
19e	Chicken pox	.02	.02	.01	.02	.07	.02	.13
19f	German measles	.02	.02	.00	.02	.01	.02	.07
19g	Meningitis, cerebrospinal (epidemic)	.19	.19	.12	.19	.16	.20	.01
19h	Mumps	1.79	1.79	.31	1.77	2.13	1.88	1.10
19i	Paratyphoid A	.01	.01	.01	.01	.00	.01	.....
19j	Paratyphoid B	.01	.01	.01	.01	.00	.01	.....
19k	Poliomyelitis, anterior, acute	.01	.01	.00	.01	.00	.01	.....
19l	Trench fever	.04	.04	.01	.04	.00	.04	.....
19m	Trench mouth	.00	.00	.01	.00	.....	.00	.....
19n	Typhoid vaccination	.03	.03	.01	.03	.01	.03	.03
19o	Vaccinia	.01	.01	.00	.01	.00	.01	.01
19p	Epidemic diseases, others	.02	.02	.05	.02	.01	.01	.19
20a	Septicæmia, general	.00	.00	.00	.00	.00	.00	.....
22	Anthrax	.00	.00	.00	.00	.00	.00	.....
24	Tetanus	.00	.00	.....	.00	.....	.00	.....
25a	Trench foot	.06	.06	.01	.06	.10	.07	.....
25b	Mycosis (others)	.01	.00	.00	.00	.02	.00	.06
26	Pellagra	.00	.00	.....	.00	.00	.00	.00
27	Beriberi	.00	.....	.....	.....	.....	.....	.35
47	Acute articular rheumatism	.17	.17	.09	.17	.18	.17	.06
	II. TUBERCULOSIS.							
28a	Tuberculosis of lungs	4.50	4.53	6.08	4.28	5.59	4.44	1.74
28b	Suspected tuberculosis	.30	.30	.28	.27	.50	.30	.03
29	Acute miliary tuberculosis	.02	.02	.00	.01	.10	.02	.02
30-35	Tuberculosis, others	.21	.21	.18	.18	.50	.21	.08
	Tuberculosis (all)	5.02	5.06	6.55	4.74	6.69	4.98	1.87

TABLE XX.—*Days lost, United States Army, 1919.*

NONEFFECTIVE RATES PER 1,000.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.03	0.03	0.00	0.03	0.03	0.25	0.20	0.05	0.20	0.20	1
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	3
.12	.14	.25	.15	.14	.02	.02	.03	.03	.03	4
.01	.01	.02	.01	.01	.....	.00	.....	.00	.00	4a
.01	.00	.00	.00	.00	.....	.....	.....	.....	.....	4b
.00	.00	.18	.02	.02	.....	.00	.....	.00	.00	4c
.09	.12	.01	.11	.11	.02	.02	.03	.02	.02	4d
.02	.01	.00	.01	.01	.01	.01	.01	.01	.01	4e
.....	.01	.08	.02	.02	.....	.00	.....	.00	.00	5
.02	.48	.57	.49	.45	.03	.12	.05	.12	.12	6
.08	.53	.01	.49	.45	.04	.09	.01	.09	.09	7
.01	.00	.....	.00	.00	.....	.00	.....	.00	.00	8
.13	.24	.07	.23	.22	.13	.22	.03	.22	.22	9
2.52	3.48	2.73	3.41	3.31	4.16	4.33	5.35	4.92	4.89	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
.20	.06	.03	.06	.07	.16	.03	.01	.01	.05	14
.00	.00	.00	.00	.00	.02	.01	.....	.01	.01	14a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14b
.16	.01	.02	.03	.04	.13	.01	.02	.01	.02	14c
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14d
.01	.02	.01	.02	.02	.02	.02	.02	.03	.03	14e
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	17
.06	.05	.07	.06	.06	.03	.01	.02	.02	.02	18
.02	.14	.03	.13	.12	.02	.09	.02	.09	.09	19a
.....	.00	.....	.00	.00	.00	.00	.....	.00	.00	19b
.00	.06	.02	.05	.05	.01	.03	.01	.03	.03	19c
.....	.01	.00	.01	.01	.01	.01	.00	.00	.00	19d
.01	.03	.12	.04	.03	.01	.01	.05	.02	.02	19e
.00	.04	.03	.04	.03	.....	.01	.00	.01	.01	19f
.06	.18	.22	.18	.17	.19	.22	.15	.23	.23	19g
.35	2.41	4.73	2.61	2.43	.30	1.56	1.20	1.66	1.60	19h
.01	.00	.....	.00	.00	.02	.02	.01	.02	.02	19i
.....	.00	.....	.00	.00	.03	.01	.00	.01	.01	19j
.00	.01	.....	.01	.01	.....	.01	.00	.01	.01	19k
.00	.01	.....	.01	.00	.02	.06	.01	.06	.06	19l
.01	.00	.....	.00	.00	.02	.00	.....	.00	.00	19m
.02	.06	.02	.06	.05	.01	.02	.01	.02	.02	19n
.00	.03	.01	.03	.03	.00	.00	.00	.00	.00	19o
.05	.01	.01	.01	.01	.00	.01	.00	.01	.01	19p
.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	20a
.00	.00	.00	.00	.00	.....	.00	.....	.00	.00	22
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	24
.00	.02	.03	.02	.02	.01	.08	.14	.10	.09	25a
.....	.01	.03	.01	.01	.00	.00	.01	.00	.00	25b
.....	.00	.00	.00	.00	.....	.00	.....	.00	.00	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
.11	.26	.26	.26	.25	.09	.13	.16	.15	.14	47
10.33	9.17	11.58	9.38	9.46	2.38	2.07	3.53	2.27	2.28	28a
.42	.35	.54	.37	.37	.18	.26	.55	.31	.30	28b
.00	.01	.08	.02	.02	.01	.01	.12	.02	.02	29
.24	.27	.74	.31	.31	.14	.14	.45	.17	.17	30–35
10.99	9.80	12.95	10.08	10.15	2.70	2.48	4.66	2.78	2.77	

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men.) Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
3	Relapsing fever		0.00		0.00		
4	Malarial fevers (all)	0.09	.58	0.92	.68		2.51
4a	Malarial fever, estivo-autumnal	.04	.08	.28	.13		1.15
4b	Malarial fever, mixed		.00		.00		.01
4c	Malarial fever, quartan						.01
4d	Malarial fever, tertian	.03	.50	.61	.53		1.23
4e	Malarial fever, unclassified	.02		.03	.01		.12
5	Smallpox	.03	.01		.01		
6	Measles (all)	.02	.19		.14	0.38	.11
7	Scarlet fever	.03	.02		.02		
8	Whooping cough						
9	Diphtheria and results		.02		.01		.01
10	Influenza (all)	.95	.62	.02	.46	.88	.75
12	Asiatic cholera		.09		.06		.01
14	Dysentery (all)	.10	.90	.13	.68		.08
14a	Dysentery, bacillary						
14b	Dysentery, balantidic						
14c	Dysentery, entamebic	.08	.73	.10	.55		.07
14e	Dysentery, unclassified	.03	.17	.02	.13		
17	Leprosy						
18	Erysipelas	.01	.04		.03		.03
19a	Carrier, bacillus, diphtheria		.01		.00		
19b	Carrier, bacillus, typhoid						
19c	Carrier, meningococcus						
19d	Carrier, epidemic diseases, others		.14		.10		
19e	Chicken pox		.01	.02	.02		
19f	German measles	.01	.05		.03		
19g	Meningitis, cerebrospinal (epidemic)		.02		.01		
19h	Mumps	.12	.66	.14	.51	.21	.07
19i	Paratyphoid A	.02					
19j	Paratyphoid B						
19k	Poliomyelitis, anterior, acute						.07
19l	Trench fever						
19m	Trench mouth	.02					
19n	Typhoid vaccination	.00	.03	.01	.02	.02	.01
19o	Vaccinia	.00	.03		.02		.01
19p	Epidemic diseases, others	.30	1.23	.10	.91		
20a	Septicemia, general						
22	Anthrax						
24	Tetanus						
25a	Trench foot						
25b	Mycosis (others)						
26	Pellagra						
27	Beriberi						
47	Acute articular rheumatism	.01	.08	.01	.06		.03
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs	.83	1.81	1.30	1.67	1.89	.96
28b	Suspected tuberculosis	.00	.09		.06	.28	.06
29	Acute miliary tuberculosis						
30–35	Tuberculosis, others	.05	.57	.23	.48	.16	.28
	Tuberculosis (all)	.89	2.47	1.53	2.21	2.33	1.29

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
0.05	0.05	0.00	.....	0.00	0.00	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	3
.06	.06	.00	0.01	.00	1.18	.....	1.72	4
.03	.03	.00	.....	.00	.21	.....	.56	4a
.....	.....	.....	.....	.....	.03	.....	.....	4b
.....	.....	.....	.....	.....	.00	.....	.....	4c
.....	.....	.00	.01	.00	.94	.....	1.16	4d
.03	.03	.00	.00	.00	.01	.....	.....	4e
.05	.05	.....	.....	.....	.01	.....	.04	5
.23	.23	.07	.02	.06	.07	0.08	.01	6
.05	.05	.02	.....	.02	.00	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	8
.05	.05	.03	.00	.03	.....	.02	.....	9
5.60	5.66	.32	.23	.32	.71	1.49	.38	10
.00	.00	.....	.....	.....	.21	.....	.....	12
.44	.44	.00	.00	.00	.39	.....	.11	14
.06	.06	.....	.....	.....	.01	.....	.03	14a
.....	.....	.....	.....	.....	.01	.....	.....	14b
.16	.16	.....	.00	.00	.17	.....	.02	14c
.22	.22	.00	.....	.00	.....	.....	.06	14e
.....	.....	.....	.....	.....	.....	.24	.....	17
.02	.02	.00	.....	.00	.....	.....	.....	18
.02	.02	.00	.....	.00	.00	.....	.....	19a
.....	.....	.....	.....	.....	.....	.....	.....	19b
.04	.04	.....	.....	.....	.....	.....	.....	19c
.00	.00	.....	.....	.....	.05	.....	.....	19d
.01	.01	.00	.01	.00	.15	.10	.06	19e
.00	.01	.00	.....	.00	.09	.....	.01	19f
.17	.17	.02	.00	.02	.....	.08	.00	19g
3.22	3.25	.33	.12	.31	1.30	.04	1.03	19h
.06	.06	.....	.....	.....	.....	.....	.....	19i
.09	.09	.....	.....	.....	.....	.....	.....	19j
.01	.01	.....	.....	.....	.....	.....	.....	19k
.....	.00	.....	.....	.....	.....	.....	.....	19l
.....	.....	.00	.....	.00	.....	.....	.....	19m
.01	.01	.00	.....	.00	.04	.....	.01	19n
.08	.08	.00	.....	.00	.01	.....	.....	19o
.13	.13	.00	.....	.00	.23	.00	.19	19p
.....	.....	.....	.....	.....	.....	.....	.....	20a
.01	.01	.....	.....	.....	.....	.....	.....	22
.....	.....	.....	.....	.....	.....	.....	.....	24
.22	.22	.00	.....	.00	.....	.....	.....	25a
.....	.....	.....	.....	.....	.09	.....	.....	25b
.....	.....	.....	.....	.....	.....	.....	.01	26
.....	.....	.....	.....	.....	.01	.....	2.03	27
.16	.17	.01	.....	.01	.09	.....	.....	47
1.87	1.90	.02	.03	.02	1.45	2.44	1.80	28a
.18	.18	.02	.02	.02	.03	.....	.07	28b
.01	.01	.....	.02	.00	.03	.....	.....	29
.13	.13	.01	.....	.01	.02	.20	.22	30–35
2.18	2.21	.05	.06	.05	1.52	2.64	2.09	

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	III. VENEREAL DISEASES (ALL).							
37	Syphilis (all)	1.45	1.45	0.89	1.18	3.80	1.49	0.85
37a	Syphilis, hereditary	.00	.00	.....	.00	.01	.01	.....
37b	Syphilis, primary	.43	.43	.17	.35	1.13	.45	.11
37c	Syphilis, secondary	.58	.58	.35	.49	1.44	.60	.32
37d	Syphilis, tertiary	.36	.36	.33	.29	1.01	.37	.33
37e	Syphilis, unclassified	.07	.07	.04	.05	.21	.07	.10
38a	Chancroidal infection	1.12	1.13	.30	.95	2.90	1.18	.34
38b	Gonococcus infection	2.68	2.70	1.41	2.54	3.91	2.77	1.43
	Venereal (all)	5.24	5.28	2.60	4.66	10.61	5.44	2.63
	IV. GENERAL DISEASES (OTHER).							
36	Rickets	.02	.02	.01	.02	.00	.02	.01
39–45	Cancer and other malignant tumors.	.04	.04	.15	.03	.06	.03	.00
46	Tumors, benign	.21	.21	.16	.22	.12	.21	.07
48a	Arthritis	1.26	1.27	1.19	1.22	1.36	1.28	.13
48b	Gout	.00	.00	.00	.00	.00	.00	.....
49	Scurvy	.00	.00	.....	.00	.....	.00	.....
50	Diabetes, mellitus	.05	.05	.15	.04	.04	.04	.....
51a	Exophthalmic goiter (hyperthyroidism).	.11	.12	.13	.12	.03	.11	.01
51b	Cretinism and myxedema	.00	.00	.....	.00	.....	.00	.01
52a	Addison's disease	.00	.00	.....	.00	.00	.00	.....
52b	Acromegaly	.00	.00	.....	.00	.....	.00	.....
53a	Leukemia	.00	.00	.00	.00	.....	.00	.00
53b	Hodgkin's disease	.01	.01	.02	.01	.01	.01	.....
88	Goiter, simple	.04	.04	.04	.04	.01	.04	.....
116	Spleen, diseases of	.00	.00	.01	.00	.....	.00	.00
53c	Other diseases of the ductless glands.	.00	.00	.....	.00	.00	.00	.....
54	Anemia, chlorosis	.02	.02	.02	.02	.00	.02	.03
55a	Hemophilia	.00	.00	.....	.00	.....	.00	.....
55b	Obesity	.00	.00	.....	.00	.....	.00	.....
55c	Purpura	.00	.00	.00	.00	.00	.00	.01
55d	Muscular rheumatism	.10	.10	.05	.09	.12	.10	.07
55e	General diseases, others	.10	.10	.10	.09	.12	.10	.01
56a	Alcoholism (acute or chronic)	.06	.06	.09	.07	.01	.06	.00
56b	Drug addiction	.02	.02	.02	.02	.03	.02	.01
57–59	Poisoning, chronic	.00	.00	.00	.00	.00	.00	.....
	V. NERVOUS SYSTEM, DISEASES OF (ALL).							
60	Encephalitis	.01	.01	.01	.01	.00	.01	.....
61	Meningitis, simple	.01	.01	.01	.01	.02	.01	.....
62	Locomotor ataxia	.01	.01	.02	.01	.01	.01	.....
63a	Multiple sclerosis	.00	.00	.00	.00	.....	.00	.....
63b	Spinal cord, diseases of (others)	.02	.02	.02	.02	.01	.02	.01
64	Apoplexy	.02	.02	.01	.02	.03	.02	.01
66a	Facial paralysis	.03	.03	.04	.03	.02	.03	.01
66b	Paraplegia	.00	.00	.02	.00	.00	.00	.....
66c	Paralysis without specified cause (others).	.03	.03	.03	.03	.02	.03	.02
69	Epilepsy	.17	.17	.03	.16	.21	.18	.01
74a	Jacksonian epilepsy	.00	.00	.00	.00	.00	.00	.....
74b	Neurasthenia	.35	.35	.94	.34	.09	.32	.04
74c	Enuresis	.04	.04	.00	.04	.03	.04	.....
74d	Neurosis	.01	.01	.04	.01	.00	.01	.00
74e	Neurocirculatory asthenia (disordered action of the heart).	.20	.20	.08	.21	.16	.21	.....

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	576,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classi-No.
	White.	Colored.	Total.			White.	Colored.	Total.		
1.05	1.75	8.70	2.37	2.26	0.83	0.92	2.02	1.12	1.11	37
.....	.01	.00	.01	.01	.....	.00	.01	.00	.00	37a
.15	.48	2.60	.67	.63	.21	.31	.61	.38	.37	37b
.34	.78	3.95	1.06	1.00	.38	.33	.47	.37	.37	37c
.53	.43	1.93	.56	.56	.18	.23	.71	.29	.29	37d
.03	.06	.22	.07	.07	.05	.05	.23	.08	.08	37e
.15	.82	6.15	1.29	1.20	.49	.97	1.66	1.10	1.07	38a
.83	3.59	9.70	4.13	3.86	2.20	2.21	1.49	2.30	2.30	38b
2.03	6.16	24.55	7.78	7.32	3.53	4.11	5.18	4.52	4.48	
.01	.03	.00	.03	.03	.01	.02	.00	.02	.02	36
.19	.04	.16	.05	.06	09	.02	.02	.02	.03	39–45
.25	.16	.14	.16	.16	.08	.10	.13	.11	.11	46
1.25	1.21	1.03	1.19	1.20	1.31	1.37	1.69	1.47	1.46	48a
.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	48b
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	49
.20	.06	.07	.06	.07	.12	.04	.04	.04	.04	50
.11	.12	.01	.11	.11	.17	.13	.04	.13	.13	51a
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	51b
.....	.00	.00	.00	.00	.....	.00	.....	.00	.00	52a
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	52b
.00	.00	.....	.00	.00	.....	.00	.....	.00	.00	53a
.04	.01	.01	.01	.01	.....	.01	.01	.01	.01	53b
.04	.04	.02	.04	.04	.05	.04	.01	.04	.04	88
.03	.00	.....	.00	.00	.00	.00	.....	.00	.00	116
.....	.01	.00	.01	.01	.....	.00	.....	.00	.00	53c
.01	.02	.00	.02	.02	.03	.02	.00	.01	.02	54
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	55a
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	55b
.00	.00	.....	.00	.00	.....	.00	.00	.00	.00	55c
.06	.10	.20	.11	.10	.04	.09	.09	.10	.10	55d
.06	.06	.04	.06	.06	.16	.13	.17	.14	.14	55e
.04	.05	.02	.05	.05	.15	.07	.01	.06	.07	56a
.01	.04	.09	.04	.04	.02	.01	.01	.01	.01	56b
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	57–59
.01	.01	.01	.01	.01	.02	.01	.00	.01	.01	60
.01	.01	.01	.01	.01	.01	.01	.03	.02	.02	61
.04	.01	.00	.01	.01	.01	.01	.02	.01	.01	62
.01	.01	.....	.01	.01	.00	.00	.....	.00	.00	63a
.03	.04	.02	.04	.03	.02	.02	.00	.02	.02	63b
.00	.03	.10	.04	.04	.03	.02	.00	.01	.02	64
.04	.04	.03	.03	.03	.05	.02	.02	.02	.02	66a
.03	.01	.00	.01	.01	.01	.00	.00	.00	.00	66b
.02	.04	.04	.04	.04	.03	.03	.02	.03	.03	66c
.05	.18	.24	.19	.18	.00	.16	.22	.19	.18	69
.....	.00	.00	.00	.00	.00	.00	.....	.00	.00	74a
.97	.39	.12	.37	.42	.99	.34	.08	.33	.36	74b
.01	.04	.03	.04	.04	.....	.04	.03	.04	.04	74c
.04	.01	.00	.01	.01	.05	.01	.00	.01	.01	74d
.05	.08	.03	.08	.08	.12	.31	.24	.32	.31	74e

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men.)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)	0.24	1.73	0.73	1.45	0.78	0.48
37a	Syphilis, hereditary						
37b	Syphilis, primary	.01	.17		.12	.23	.06
37c	Syphilis, secondary	.23	.79	.07	.59	.23	.24
37d	Syphilis, tertiary		.76	.65	.73	.27	.15
37e	Syphilis, unclassified		.01	.01	.01	.05	.02
38a	Chancroidal infection	.11	5.30	4.69	5.12	.13	1.83
38b	Gonococcus infection	.36	7.19	9.98	7.98	4.67	1.68
	Venereal (all)	.71	14.22	15.39	14.55	5.58	3.99
	IV. GENERAL DISEASES (OTHER).						
36	Rickets						
39–45	Cancer and other malignant tumors	.25	.16	.05	.13	.01	
46	Tumors, benign	.05	.10	.01	.07	.03	.04
48a	Arthritis	.10	.39	.08	.30	.33	.30
48b	Gout	.01					
49	Scurvy						
50	Diabetes, mellitus		.00		.00		
51a	Exophthalmic goiter (hyperthyroidism).		.08		.06	.10	.04
51b	Cretinism and myxedema						
52a	Addison's disease						
52b	Acromegaly						
53a	Leukemia						.00
53b	Hodgkin's disease						.04
88	Goiter, simple		.08		.06	.05	.03
116	Spleen, diseases of						
53c	Other diseases of the ductless glands						
54	Anemia, chlorosis		.01		.01		
55a	Hemophilia						
55b	Obesity						
55c	Purpura						
55d	Muscular rheumatism	.01	.21		.15	.10	.01
55e	General diseases, others		.00	.01	.00	.05	.01
56a	Alcoholism (acute or chronic)	.02	.23	.05	.18	.22	.11
56b	Drug addiction	.04		.13	.04		
57–59	Poisoning, chronic					.01	
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
62	Locomotor ataxia		.09		.06		
63a	Multiple sclerosis						
63b	Spinal cord, diseases of (others)	.00	.02		.01		.08
64	Apoplexy						
66a	Facial paralysis						
66b	Paraplegia		.12		.09		
66c	Paralysis without specified cause (others).	.01	.13		.09	.01	
69	Epilepsy	.01	.22		.16	.35	.11
74a	Jacksonian epilepsy						
74b	Neurasthenia	.46	.40		.29	.05	.71
74c	Enuresis		.12	.33	.18	.33	.01
74d	Neurosis	.01				.01	.06
74e	Neuro-circulatory asthenia (disordered action of the heart).						.00

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
3.64	3.71	0.04	.....	0.03	0.35	0.76	2.88	37
.01	.01	.....	.....	.....	.....	.....	.....	37a
.66	.66	.01	.....	.01	.02	.06	.53	37b
2.62	2.63	.02	.....	.02	.25	.06	.76	37c
.32	.38	.01	.....	.01	.03	.64	1.21	37d
.03	.03	.00	.....	.00	.05	.....	.38	37e
6.43	6.44	.06	0.08	.06	.17	.12	1.19	38a
.10	.10	.09	.06	.08	1.04	2.32	1.81	38b
10.16	10.25	.18	.14	.18	1.57	3.21	5.88	
.06	.06	.00	.....	.00	.01	.....	.....	36
.....	.....	.01	.....	.01	.00	.02	.....	39–45
9.20	9.26	.....	.....	.....	.08	.03	.10	46
1.92	1.92	.03	.01	.03	.05	.34	.25	48a
.....	.....	.....	.....	.....	.....	.....	.....	48b
.....	.....	.....	.....	.....	.....	.....	.....	49
.13	.13	.....	.....	.....	.....	.....	.....	50
.23	.23	.00	.....	.00	.02	.....	.....	51a
.....	.....	.....	.....	.....	.....	.....	.03	51b
.....	.....	.....	.....	.....	.....	.....	.....	52a
.....	.....	.....	.....	.....	.....	.....	.....	52b
.....	.....	.....	.....	.....	.....	.....	.00	53a
.....	.....	.....	.....	.....	.....	.....	.....	53b
.11	.11	.00	.....	.00	.....	.....	.....	88
.....	.....	.....	.....	.....	.....	.....	.00	116
.06	.06	.....	.....	.....	.....	.....	.....	53c
.01	.01	.....	.....	.....	.03	.....	.02	54
.....	.....	.....	.....	.....	.....	.....	.....	55a
.....	.....	.....	.....	.....	.....	.....	.....	55b
.....	.....	.00	.....	.00	.....	.05	.....	55c
.30	.30	.00	.00	.00	.09	.01	.03	55d
.07	.07	.00	.....	.00	.01	.02	.....	55e
.45	.45	.00	.....	.00	.00	.....	.01	56a
.....	.....	.....	.....	.....	.....	.05	.....	56b
.....	.....	.....	.....	.....	.....	.....	.....	57–59
.....	.00	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	61
.....	.....	.00	.....	.00	.....	.....	.....	62
.04	.04	.....	.....	.....	.....	.....	.....	63a
.05	.05	.....	.....	.....	.00	.....	.02	63b
.06	.06	.....	.....	.....	.02	.....	.....	64
.06	.06	.....	.....	.....	.01	.....	.....	66a
.....	.....	.....	.....	.....	.....	.....	.....	66b
.01	.01	.00	.....	.00	.03	.....	.01	65c
.27	.31	.00	.....	.00	.01	.....	.....	69
.....	.....	.....	.....	.....	.....	.....	.....	74a
.21	.21	.01	.....	.01	.....	.05	.17	74b
.06	.06	.....	.....	.....	.....	.....	.....	74c
.00	.00	.....	.....	.....	.....	.....	.01	74d
.05	.05	.01	.....	.01	.....	.....	.....	74e

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—continued.							
74f	Shell shock (cause not given)	0.02	0.02	0.07	0.02	0.00	0.02	0.00
72	Chorea	.01	.01	.....	.01	.00	.01	.00
73a	Hysteria and results (psychoses excepted).	.24	.25	.24	.25	.16	.25	.02
73b	Neuralgia	.04	.04	.06	.04	.04	.04	.02
73c	Neuritis	.19	.19	.46	.17	.10	.17	.11
73d	Speech, defective	.00	.00	.00	.00	.00	.00	.....
74g	Nervous system, other diseases of	.10	.10	.78	.06	.04	.06	.02
	VI. MENTAL ALIENATION.							
67	General paralysis of the insane	.04	.04	.07	.03	.05	.04	.....
68a	Constitutional psychopathic states	.22	.22	.11	.24	.05	.23	.....
68b	Mental deficiency	.26	.26	.01	.26	.43	.28	.11
68c	Malingering	.00	.00	.....	.00	.00	.00	.00
68d	Dementia præcox	.75	.75	.15	.80	.67	.79	.21
68e	Psychasthenia	.04	.04	.12	.03	.00	.03	.....
68f	Psychoneurosis	.12	.12	.31	.12	.04	.11	.....
68g	Psychosis, alcoholic	.03	.03	.03	.03	.01	.03	.....
68h	Psychosis, manic depressive	.27	.27	.39	.27	.18	.27	.....
68i	Psychosis (others)	.25	.26	.23	.25	.29	.26	.03
	VII. EYES AND THEIR ANNEXA, DISEASES OF.							
75a	Refractive errors (all)	.09	.09	.05	.10	.04	.09	.02
	(1) Astigmatism	.04	.04	.02	.04	.02	.04	.01
	(2) Hyperopia	.02	.02	.01	.02	.01	.02	.....
	(3) Myopia	.02	.02	.01	.02	.01	.02	.00
	(4) Defective vision (cause not stated).	.01	.01	.01	.01	.00	.01	.....
75b	Strabismus	.01	.01	.01	.01	.01	.01	.01
75c	Leucoma	.01	.01	.00	.00	.02	.01	.....
75d	Cataract	.01	.01	.01	.01	.01	.01	.00
75e	Trachoma	.05	.05	.02	.06	.02	.05	.02
75f	Conjunctivitis (others)	.13	.13	.09	.12	.17	.13	.12
75g	Pterygium	.01	.01	.02	.01	.02	.01	.05
75h	Amblyopia	.02	.02	.00	.02	.02	.02	.....
75i	Amaurosis	.00	.00	.....	.00	.00	.00	.00
75j	Choroiditis	.02	.02	.04	.02	.03	.02	.....
75k	Iritis	.06	.06	.09	.05	.10	.06	.01
75l	Keratitis	.08	.08	.08	.07	.16	.08	.06
75m	Retinitis	.02	.02	.04	.02	.01	.02	.....
75n	Nystagmus	.00	.00	.....	.00	.00	.00	.....
75o	Glaucoma	.00	.00	.02	.00	.00	.04	.....
75p	Eyelids, diseases of	.02	.02	.01	.02	.02	.02	.01
75r	Eyes and adnexa, other diseases of	.09	.09	.09	.08	.10	.09	.03
	VIII. EAR, DISEASES OF.							
76a	Otitis media	.83	.84	.68	.87	.37	.85	.07
76b	Mastoiditis	.09	.09	.03	.09	.07	.09	.00
76c	Otitis external	.01	.01	.01	.01	.00	.01	.02
76d	Defective hearing (cause not stated)	.01	.01	.01	.01	.00	.01	.....
76e	Ear, other diseases of	.01	.01	.02	.01	.02	.01	.01

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	576,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
0.04	0.01	.....	0.01	0.01	0.12	0.03	0.00	0.03	0.03	74f
.....	.01	0.00	.01	.01	.....	.00	.....	.00	.00	72
.30	.27	.17	.26	.26	.20	.27	.18	.27	.27	73a
.05	.05	.06	.05	.05	.09	.03	.04	.04	.04	73b
.58	.19	.09	.18	.21	.38	.18	.11	.18	.19	73c
.00	.00	.00	.00	.00	.00	.00	.....	.00	.00	73d
1.35	.06	.04	.06	.16	.28	.06	.05	.06	.07	74g
.10	.05	.10	.05	.06	.06	.03	.03	.03	.03	67
.10	.28	.07	.26	.25	.14	.24	.05	.23	.23	68a
.00	.22	.51	.25	.23	.01	.30	.44	.31	.30	68b
.....	.00	.00	.00	.00	.....	.00	.....	.00	.00	68c
.19	1.25	1.11	1.24	1.16	.12	.64	.53	.64	.61	68d
.18	.04	.....	.03	.05	.09	.03	.00	.03	.03	68e
.28	.12	.02	.11	.12	.36	.14	.05	.13	.14	68f
.04	.03	.00	.03	.03	.03	.03	.01	.03	.03	68g
.31	.43	.24	.41	.40	.47	.22	.18	.22	.23	68h
.22	.26	.35	.27	.27	.27	.28	.30	.29	.29	68i
.04	.06	.02	.05	.05	.06	.12	.06	.12	.12	75a
.01	.03	.01	.02	.02	.0.	.06	.03	.06	.05	(1)
.00	.01	.00	.01	.01	.02	.02	.02	.02	.02	(2)
.01	.01	.00	.01	.01	.00	.03	.02	.03	.03	(3)
.01	.01	.00	.00	.01	.01	.01	.....	.01	.01	(4)
.00	.02	.02	.02	.02	.02	.01	.01	.01	.01	75b
.....	.01	.02	.01	.01	.00	.00	.02	.01	.01	75c
.01	.01	.00	.01	.01	.02	.01	.02	.02	.02	75d
.05	.08	.02	.08	.08	.00	.05	.02	.04	.04	75e
.09	.11	.20	.12	.12	.10	.13	.17	.14	.14	75f
.03	.02	.03	.02	.02	.01	.01	.02	.01	.01	75g
.00	.01	.02	.01	.01	.01	.03	.02	.03	.03	75h
.....	.00	.....	.00	.00	.....	.00	.01	.00	.00	75i
.06	.02	.02	.02	.02	.02	.03	.03	.03	.03	75j
.09	.08	.14	.08	.08	.10	.04	.10	.05	.05	75k
.09	.07	.16	.08	.08	.07	.08	.17	.10	.10	75l
.05	.02	.01	.02	.02	.03	.02	.00	.02	.02	75m
.....	.00	.00	.00	.00	.....	.00	.00	.00	.00	75n
.02	.01	.00	.01	.01	.02	.00	.00	.00	.00	75o
.02	.02	.02	.02	.02	.01	.02	.02	.02	.02	75p
.10	.10	.15	.10	.10	.09	.09	.09	.09	.09	75r
.57	.83	.33	.78	.77	.90	.99	.44	.98	.98	76a
.01	.14	.07	.14	.13	.05	.08	.08	.08	.08	76b
.02	.02	.00	.02	.02	.00	.01	.00	.01	.01	76c
02	.00	.....	.00	.00	.00	.01	.00	.01	.01	76d
.03	.01	.01	.01	.01	.02	.01	.01	.01	.01	76e

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Mean strength	Officers, other countries. 4,067	American troops in other countries (enlisted men.) Philippine Islands. White. 3,882	Philippine Islands. Colored. 1,540	Philippine Islands. Total. 5,422	Hawaii. White. 3,140	Panama. White. 5,001
	V. NERVOUS SYSTEM, DISEASES OF (ALL)—continued.							
71f	Shell shock (cause not given)							
72	Chorea			0.09		0.06		
73a	Hysteria and results (psychoses excepted).		0.06	.02		.02	0.03	0.09
73b	Neuralgia		.00	.09	0.04	.08	.02	.02
73c	Neuritis		.06	.02	.09	.04	.07	.10
73d	Speech, defective							
74g	Nervous system, other diseases of.		.06	.04	.01	.03	.01	10
	VI. MENTAL ALIENATION.							
67	General paralysis of the insane							
68a	Constitutional psychopathic states				.28	.08	.28	.16
68b	Mental deficiency			.25	.32	.27	.42	.02
68c	Malingering			.00	.01	.01		.00
68d	Dementia præcox		.05	.07	.90	.31	.02	.70
68e	Psychasthenia		.00	.00		.00	.00	
68f	Psychoneurosis		.24	.08		.06	.06	
68g	Psychosis, alcoholic							.15
68h	Psychosis, manic depressive		.39	.04	.02	.03		.08
68i	Psychosis (others)			.03	.01	.04	.11	.15
	VII. EYES AND THEIR ANNEXA, DISEASES OF.							
75a	Refractive errors (all)		.02	.14		.10	.04	
	(1) Astigmatism		.02	.02		.01	.01	
	(2) Hyperopia			.04		.03	.03	
	(3) Myopia		.00	.07		.05		
	(4) Defective vision (cause not stated).							
75b	Strabismus			.04		.03		
75c	Leucoma						.01	
75d	Cataract							
75e	Trachoma			.09		.07		.00
75f	Conjunctivitis (other)		.03	.04	.03	.04	.13	.07
75g	Pterygium		.01	.01		.01	.00	.02
75h	Amblyopia						.02	
75i	Amaurosis							
75j	Choroiditis						.05	.00
75k	Iritis			.07		.05	.06	
75l	Keratitis			.01		.01	.08	.00
75m	Retinitis			.03		.02		.01
75n	Nystagmus						.00	
75o	Glaucoma					.03	.01	
75p	Eyelids, diseases of		.00	.02		.01	.29	.01
75r	Eyes and annexa, other diseases of.		.01	.03	.02	.03	.18	.01
	VIII. EAR, DISEASES OF.							
76a	Otitis media		.07	.15	.20	.17	.35	.38
76b	Mastoiditis			.02		.01	.04	.02
76c	Otitis external		.02	.10		.07	.01	.16
76d	Defective hearing (cause not stated).						.04	.00
76e	Ear, other diseases of		.00	.00	.27	.08	.08	

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
0.05	0.05				0.06			74f
							0.01	72
.30	.30	0.01		0.00		0.03	.07	73a
.05	.05	.00		.00	.02	.01	.01	73b
.43	.44	.01		.01	.04	.09	.40	73c
.03	.03							73d
.01	.01	.00		.00	.02	.01		74g
								67
.39	.40	.00		.00				68a
.73	.73	.00		.00	.07	.29	.04	68b
.00	.00	.00		.00	.00		.01	68c
.42	.42	.01		.01	.20	.14	.26	68d
.06	.06							68e
.03	.03							68f
.07	.07	.00		.00				68g
.17	.17							68h
.04	.07	.00		.00	.00		.18	68i
.48	.48	.00		.00	.02		.01	75a
.25	.25	.00		.00	.02			(1)
.05	.05							(2)
.18	.18				.00		.01	(3)
.01	.01							(4)
.03	.03					.06		75b
		.00		.00				75c
					.00			75d
.05	.05				.00	.04	.06	75e
.23	.23	.00	0.01	.00	.12	.11	.08	75f
.01	.01	.00		.00	.05	.02	.05	75g
.03	.03							75h
.02	.02					.02		75i
								75j
.01	.01	.01		.01			.09	75k
.04	.04	.00		.00	.02	.24		75l
.03	.03							75m
.02	.02							75n
.01	.01							75o
.03	.03	.00		.00	.01	.00	.00	75p
.05	.05	.00		.00	.01	.11	.03	75r
1.45	1.49	.03	.04	.03	.02	.09	.24	76a
.11	.11	.00		.00			.03	76b
.02	.02	.00		.00	.01	.03	.02	76c
								76d
.02	.02				.02		.00	76e

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	IX. NASAL FOSSÆ, DISEASES OF.							
86a	Adenoids	0.01	0.01	0.01	0.01	0.00	0.01	.....
86b	Deviation of nasal septum and spurs.	.11	.11	.29	.11	.02	.10	0.00
86c	Nose, external deformity of	.....	.....	.....	.....	.....	.....	.....
86d	Turbinate hypertrophy	.03	.03	.03	.03	.03	.03	.04
86e	Sinusitis (all)	.29	.29	.75	.27	.15	.26	.01
86f	Polypus, nasal	.01	.01	.03	.01	.00	.01	.....
86g	Perforated nasal septum	.00	.00	.....	.00	.00	.00	.....
86h	Rhinitis (cause not stated)	.17	.17	.19	.17	.13	.17	.04
86i	Nasal fossæ, other diseases of	.05	.05	.04	.04	.06	.05	.01
	X. THROAT, DISEASES OF.							
87a	Laryngitis, acute catarrhal	.19	.19	.18	.19	.13	.19	04
87b	Larynx, other diseases of	.00	.00	.00	.00	.....	.00	.....
100a	Tonsilitis, acute	1.14	1.15	.89	1.17	.95	1.17	.18
100b	Tonsillitis, chronic	.26	.26	.71	.25	.06	.24	.04
100c	Tonsils, focal infection from	.01	.01	.03	.01	.01	.01	.00
100d	Pharyngitis, acute catarrhal	.31	.32	.27	.32	.22	.32	.11
100e	Pharynx, other diseases of	.19	.19	.35	.19	.04	.18	.02
	XI. CIRCULATORY SYSTEM, DISEASES OF.							
77	Pericarditis	.01	.01	.00	.01	.02	.01	.....
78	Endocarditis, acute	.01	.01	.01	.01	.01	.01	.....
79a	Valvular diseases of the heart	.41	.42	.38	.40	.53	.42	.12
	(1) Aortic insufficiency	.04	.04	.05	.03	.05	.04	.01
	(2) Aortic stenosis	.01	.01	.02	.01	.01	.01	.....
	(3) Mitral insufficiency	.30	.30	.26	.29	.39	.31	.09
	(4) Mitral stenosis	.05	.05	.03	.05	.04	.05	.00
	(5) Combined lesions, mitral aortic.	.01	.01	.01	.01	.02	.01	.01
	(6) Pulmonic lesions	.00	.00	.....	.00	.....	.00	.....
	(7) Tricuspid lesions	.....	.....	.....	.....	.....	.....	.....
	(8) Valvular lesions, unclassified.	.01	.01	.01	.01	.01	.01	.01
79b	Cardiac hypertrophy	.02	.02	.03	.01	.02	.02	.....
79c	Cardiac dilatation	.01	.01	.03	.01	.00	.01	.....
79d	Myocarditis and myocardial insufficiency.	.09	.09	.25	.08	.09	.08	.02
79e	Heart, other organic diseases of	.04	.04	.02	.01	.06	.04	.03
80	Angina pectoris	.00	.00	.01	.00	.00	.00	.....
81a	Aneurisms	.01	.01	.02	.00	.01	.01	.....
81b	Arterial sclerosis and hypertension	.02	.02	.11	.01	.01	.01	.02
81c	Aortitis	.00	.00	.00	.00	.01	.00	.....
81d	Arteries, other diseases of	.00	.00	.01	.00	.00	.00	.....
82	Embolism and thrombosis	.01	.01	.03	.01	.01	.01	.....
83a	Hemorrhoids	.45	.46	.71	.43	.40	.44	.08
83b	Varicocele	.16	.16	.11	.17	.05	.16	.05
83c	Varicose veins	.11	.11	.14	.12	.04	.11	.03
83d	Phlebitis	.04	.04	.05	.04	.01	.04	.....
84a	Status lymphaticus	.00	.00	.....	.00	.....	.00	.....
84b	Lymphatic system, other diseases of.	.29	.29	.20	.25	.61	.29	.32
85a	Cardiac arrhythmias	.02	.02	.05	.01	.02	.02	.00
85b	Cardiac murmurs, not organic	.00	.00	.01	.01	.00	.00	.00
85c	Cardiac disorders, functional	.06	.06	.07	.06	.04	.06	.....
85d	Bradycardia	.00	.00	.....	.00	.....	.00	.00
85e	Heart block	.00	.00	.....	.00	.....	.00	.01
85f	Tachycardia	.07	.07	.05	.07	.05	.08	.02
85g	Hemorrhage	.01	.01	.02	.01	.00	.01	.00
85h	Circulatory system, other diseases of.	.00	.00	.00	.00	.01	.00	.00

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	576,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	86a
.47	.17	.01	.16	.18	.13	.08	.02	.08	.08	86b
										86c
.05	.05	.07	.05	.05	.00	.02	.01	.03	.02	86d
.55	.23	.11	.22	.24	1.05	.32	.19	.32	.35	86e
.01	.01	.00	.01	.01	.06	.01	.00	.01	.01	86f
	.00	.00	.00	.00		.00		.00	.00	86g
.27	.32	.25	.31	.31	.13	.11	.10	.11	.11	86h
.07	.11	.18	.12	.12	.01	.01	.01	.01	.01	86i
.14	.15	.16	.15	.15	.27	.22	.13	.23	.23	87a
.00	.00		.00	.00		.00		.00	.00	87b
1.25	2.27	2.17	2.26	2.18	.61	.67	.50	.68	.68	100a
1.16	.43	.08	.40	.46	.32	.18	.06	.18	.18	100b
.06	.02	.04	.02	.03	.00	.00		.00	.00	100c
.35	.64	.51	.63	.60	.22	.17	.12	.19	.19	100d
.37	.23	.06	.21	.23	.37	.19	.04	.18	.19	100e
	.01	.03	.01	.01	.01	.01	.02	.01	.01	77
.00	.01	.02	.01	.01	.02	.00	.00	.01	.01	78
.31	.45	.50	.45	.44	.49	.41	.61	.44	.44	79a
.06	.05	.09	.05	.06	.05	.03	.04	.03	.03	(1)
	.00	.01	.01	.01	.04	.00	.01	.01	.01	(2)
.19	.31	.31	.31	.30	.34	.30	.49	.33	.33	(3)
.03	.05	.04	.05	.05	.04	.05	.05	.05	.05	(4)
.01	.02	.04	.02	.02	.01	.01	.01	.01	.01	(5)
	.00		.00	.00						(6)
										(7)
.01	.01	.00	.01	.01	.01	.01	.01	.01	.01	(8)
.02	.01	.02	.01	.01	.05	.02	.02	.02	.02	79b
.06	.01	.01	.01	.01	.01	.00	.00	.00	.00	79c
.29	.09	.08	.09	.11	.23	.07	.10	.08	.09	79d
.01	.05	.08	.05	.05	.03	.04	.07	.04	.04	79e
.01	.00	.00	.00	.00	.02	.00	.00	.00	.00	80
.00	.01	.04	.01	.01	.03	.00	.00	.00	.00	81a
.16	.02	.03	.02	.03	.07	.01	.01	.01	.01	81b
		.01	.00	.00	.00	.00	.01	.00	.00	81c
	.00	.00	.00	.00	.01	.00		.00	.00	81d
.06	.02	.00	.02	.02	.01	.01	.01	.01	.01	82
1.02	.40	.37	.39	.44	.46	.49	.46	.52	.52	83a
.13	.19	.04	.18	.17	.09	.17	.05	.17	.16	83b
.20	.14	.06	.13	.14	.07	.11	.04	.11	.11	83c
.06	.08	.01	.08	.08	.04	.03	.00	.02	.03	83d
						.00		.00	.00	84a
.21	.36	1.14	.43	.41	.22	.20	.44	.24	.24	84b
.02	.02	.03	.02	.02	.07	.01	.01	.01	.01	85a
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	85b
.06	.11	.05	.11	.10	.10	.04	.05	.05	.05	85c
						.00		.00	.00	85d
	.00		.00	.00						85e
.04	.06	.03	.06	.06	.07	.09	.06	.09	.09	85f
.04	.01	.00	.01	.01	.00	.01	.00	.00	.00	85g
.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	85h

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	American troops in other countries (enlisted men.)					
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
		Officers, other countries.	Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	IX. NASAL FOSSÆ, DISEASES OF.						
86a	Adenoids	0.00				0.08	
86b	Deviation of nasal septum and spurs.	.03	0.03	0.10	0.05	.15	0.22
86c	Nose, external deformity of						
86d	Turbinate hypertrophy	.01	.07		.05	.30	.05
86e	Sinusitis (all)	.22	.15	.07	.13	.22	.02
86f	Polypus nasal						.00
86g	Perforated nasal septum						
86h	Rhinitis (cause not stated)	.07	.10	.19	.13	.07	.14
86i	Nasal fossæ, other diseases of	.00	.01	.00	.01	.00	
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal	.01	.03		.02	.17	.01
87b	Larynx, other diseases of						
100a	Tonsillitis, acute	.20	.51	.65	.57	.58	.44
100b	Tonsillitis, chronic	.13	.25	.19	.23	.01	.14
100c	Tonsils, focal infection from						
100d	Pharyngitis, acute catarrhal	.13	.21	.08	.17	.11	.04
100e	Pharynx, other diseases of	.05	.16	.08	.14	.03	.01
	XI. CIRCULATORY SYSTEM, DISEASES OF.						
77	Pericarditis		.02		.02		
78	Endocarditis, acute						
79a	Valvular diseases of the heart	.20	.28	.07	.22	.95	.13
	(1) Aortic insufficiency			.07	.02		
	(2) Aortic stenosis		.08		.05		
	(3) Mitral insufficiency	.10	.17	.00	.12	.78	.08
	(4) Mitral stenosis	.02	.02		.02	.07	.01
	(5) Combined lesions, mitral aortic.					.06	.05
	(6) Pulmonic lesions					.05	
	(7) Tricuspid lesions						
	(8) Valvular lesions, unclassified.	.03	.01		.01		
79b	Cardiac hypertrophy			.04	.01	.06	
79c	Cardiac dilatation		.01		.01	.00	
79d	Myocarditis and myocardial insufficiency.	.09	.09	.39	.17		
79e	Heart, other organic diseases of		.27		.19	.08	
80	Angina pectoris						
81a	Aneurisms						
81b	Arterial sclerosis and hypertension					.05	
81c	Aortitis						
81d	Arteries, other diseases of	.00				.08	
82	Embolism and thrombosis	.01					
83a	Hemorrhoids	.17	.48	.34	.44	.13	.26
83b	Varicocele	.09	.33	.18	.29	.38	.22
83c	Varicose veins	.20	.01		.00	.20	.06
83d	Phlebitis					.01	.03
84a	Status lymphaticus						
84b	Lymphatic system, other diseases of.	.03	.21	.57	.31	.10	.97
85a	Cardiac arrhythmias	.04	.04	.05	.04		
85b	Cardiac murmurs, not organic	.09				.01	.00
85c	Cardiac disorders, functional		.17	.01	.12	.12	.00
85d	Bradycardia		.01		.01		
85e	Heart block						
85f	Tachycardia	.02	.00	.01	.00	.36	.01
85g	Hemorrhage						
85h	Circulatory system, other diseases of.	.00	.00		.00		

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
0.00	0.00							86a
.08	.10				0.00	0.02		86b
								86c
.03	.03	0.00		0.00		.03	0.17	86d
.31	.31	.00	0.00	.00	.01	.03	.01	86e
								86f
								86g
.14	.15	.01	.01	.01	.05	.00	.05	86h
.03	.03	.00		.00	.01			86i
.39	.39		.00	.00	.03	.04	.06	87a
.04	.04							87b
1.86	1.88	.08	.04	.08	.13	.19	.33	100a
.27	.27	.01		.01	.02	.01	.13	100b
.02	.02				.00			100c
.17	.17	.01	.00	.01	.10	.02	.23	100d
.34	.34	.00		.00	.02	.01	.03	100e
								77
.00	.00							78
.77	.78	.02		.02	.07	.16	.28	79a
.02	.02						.05	(1)
								(2)
.65	.65	.02		.02	.06	.16	.17	(3)
.09	.09				.00			(4)
		.00		.00	.01			(5)
								(6)
								(7)
.00	.00	.00		.00			.06	(8)
.01	.01							79b
.01	.01							79c
.13	.13	.00	.00	.00	.02			79d
.06	.06	.00		.00	.04		.01	79e
								80
								81a
.02	.02				.02			81b
								81c
								81d
								82
.55	.55	.00	.01	.00	.07	.17	.02	83a
.16	.17	.00	.00	.00	.04	.03	.08	83b
.41	.41	.00		.00	.03	.00	.06	83c
.02	.02	.00		.00				83d
								84a
.29	.31	.01	.04	.02	.16	.04	1.20	84b
.03	.03				.00			85a
.02	.02						.01	85b
.03	.03	.01		.00				85c
		.00		.00	.01			85d
					.00	.03		85e
.06	.06	.00		.00			.12	85f
.00	.00				.00		.01	85g
					.00			85h

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XII. RESPIRATORY SYSTEM, DISEASES OF.							
89-90	Bronchitis	2.72	2.74	2.92	2.60	2.58	2.73	1.00
91	Pneumonia, broncho	1.02	1.04	.72	.93	1.67	1.05	.09
92a	Pneumonia, lobar	.96	.97	.46	.74	2.93	1.00	.35
92b	Pneumonia, unclassified	.07	.07	.08	.05	.13	.07	.....
93a	Pleurisy, suppurative	.39	.39	.19	.40	.40	.40	.05
93b	Pleurisy, serofibrinous	.30	.30	.17	.30	.36	.31	.07
93c	Pleura, other diseases of	.34	.34	.25	.32	.49	.34	.05
96	Asthma	.14	.14	.16	.13	.20	.14	.12
97	Pulmonary emphysema	.01	.01	.01	.01	.01	.01	.....
98	Lungs, other diseases of	.02	.02	.05	.01	.01	.01	.01
	XIII. DIGESTIVE SYSTEM, DISEASES OF.							
99a	Pyorrhea alveolaris	.06	.06	.09	.06	.02	.05	.00
99b	Abscess periapical, focal infection from.	.00	.00	.01	.00	.00	.00	.....
99c	Mouth and adnexa, other diseases of.	.14	.14	.21	.13	.10	.14	.07
101	Esophagus, diseases of	.00	.00	.....	.00	.00	.00	.....
102a	Ulcer of the stomach	.06	.06	.17	.06	.03	.05	.05
102b	Gastro-enteroptosis	.02	.02	.06	.02	.01	.02	.....
102c	Stomach, other diseases of	.38	.38	.47	.38	.25	.38	.26
105a	Duodenal ulcer	.04	.04	.17	.04	.01	.04	.....
105b	Diarrhea	.06	.06	.05	.05	.03	.06	.07
105c	Enteritis and colitis	.34	.34	.36	.33	.19	.34	.12
106	Ankylostomiasis (uncinariasis, hookworm).	.02	.02	.00	.02	.01	.02	.33
107a	Ascaris lumbricoides	.01	.00	.00	.00	.02	.00	.19
107b	Cestodes	.01	.01	.02	.01	.00	.01	.01
107c	Intestinal parasites, others	.00	.00	.01	.00	.00	.00	.07
108	Appendicitis (all)	.99	1.00	1.22	.99	.59	.99	.32
109a	Hernia	1.19	1.20	1.48	1.22	.56	1.18	.18
109b	Intestinal obstruction	.01	.01	.03	.01	.01	.01	.00
110a	Fistula in ano	.12	.12	.08	.12	.13	.12	.01
110b	Intestines, other diseases of	.30	.30	.54	.28	.30	.29	.74
113	Cirrhosis of the liver	.01	.01	.02	.00	.01	.00	.04
114	Cholelithiasis	.01	.01	.06	.01	.01	.01	.01
115a	Cholecystitis	.08	.08	.23	.08	.03	.07	.01
115b	Gall bladder and bile duct, other diseases of.	.08	.05	.12	.07	.04	.07	.03
115c	Liver, other diseases of	.01	.01	.02	.01	.01	.01	.02
117b	Peritoneal adhesions	.06	.06	.09	.06	.04	.06	.01
118a	Pancreatitis	.00	.00	.00	.00	.....	.00	.....
118b	Visceroptosis	.00	.00	.01	.01	.00	.00	.00
118c	Digestive system, other diseases of.	.01	.01	.01	.01	.00	.01	.00
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).							
119	Nephritis, acute	.10	.11	.13	.10	.04	.10	.01
120	Nephritis, chronic	.31	.31	.34	.31	.19	.31	.04
122a	Abscess perinephritic	.00	.00	.01	.00	.....	.00	.....
122b	Nephroptosis	.00	.00	.01	.00	.00	.00	.....
122c	Hydronephrosis	.00	.00	.02	.00	.....	.00	.01
122d	Pyogenic infection of the kidneys	.04	.05	.10	.04	.02	.04	.....
122e	Kidney and adnexa, other diseases of.	.03	.03	.07	.02	.04	.02	.00
123	Nephrolithiasis	.05	.05	.14	.05	.02	.05	.....
124a	Cystitis	.07	.07	.14	.07	.07	.07	.03
124b	Bladder, other diseases of	.02	.02	.00	.02	.03	.02	.00
125a	Urethritis (nonvenereal)	.06	.06	.08	.05	.08	.06	.02

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	576,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
2.27	2.42	2.52	2.43	2.42	3.92	3.01	2.93	3.21	3.25	89–90
.53	.86	1.45	.91	.88	1.03	1.09	1.96	1.27	1.26	91
.21	.64	2.81	.83	.78	.78	.87	3.35	1.20	1.19	92a
.08	.07	.20	.08	.08	.09	.05	.12	.07	.07	92b
.20	.80	.74	.80	.75	.21	.22	.27	.24	.24	93a
.14	.24	.35	.25	.24	.24	.37	.40	.38	.38	93b
.31	.39	.49	.40	.40	.21	.31	.54	.35	.35	93c
.18	.16	.20	.16	.16	.14	.12	.21	.14	.14	96
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	97
.10	.02	.02	.02	.03	.00	.01	.01	.01	.01	98
.08	.03	.03	.03	.03	.11	.07	.01	.07	.07	99a
.02	.00	.00	.00	.01	.....	.00	.00	.00	.00	99b
.15	.11	.14	.11	.12	.30	.16	.10	.16	.17	99c
.....	.01	.00	.01	.01	.....	.00	.....	.00	.00	101
.16	.07	.02	.07	.07	.20	.05	.03	.05	.06	102a
.10	.03	.00	.03	.03	.02	.02	.01	.02	.02	102b
.42	.42	.27	.41	.41	.58	.39	.26	.40	.40	102c
.23	.06	.01	.05	.07	.14	.03	.01	.03	.03	105a
.04	.02	.03	.02	.03	.05	.06	.03	.07	.07	105b
.31	.19	.11	.18	.19	.45	.45	.25	.46	.46	105c
.00	.04	.04	.04	.04	.00	.01	.00	.01	.01	106
.....	.00	.04	.01	.00	.00	.00	.00	.00	.00	107a
.03	.01	.00	.01	.01	.01	.01	.00	.01	.01	107b
.00	.01	.00	.01	.01	.01	.00	.00	.00	.00	107c
1.23	1.03	.62	.99	1.01	1.30	1.04	.58	1.05	1.06	108
2.09	1.66	.57	1.56	1.61	1.03	1.12	.63	1.11	1.11	109a
.05	.02	.01	.02	.02	.02	.01	.01	.01	.01	109b
.....	.15	.17	.15	.14	.19	.11	.12	.12	.12	110a
.87	.44	.55	.45	.48	.24	.19	.20	.20	.20	110b
.00	.01	.00	.01	.00	.04	.00	.01	.00	.01	113
.04	.01	.....	.01	.01	.09	.01	.01	.01	.01	114
.21	.07	.03	.07	.08	.28	.08	.03	.08	.09	115a
.09	.07	.06	.07	.07	.18	.08	.05	.08	.09	115b
.02	.02	.01	.02	.02	.01	.01	.01	.01	.01	115c
.08	.06	.03	.05	.06	.11	.07	.05	.08	.07	117b
.00	.....	.....	.00	.00	.....	.00	.....	.00	.00	118a
.01	.01	.00	.01	.01	.01	.00	.....	.00	.00	118b
.01	.01	.00	.01	.01	.00	.01	.01	.01	.01	118c
.10	.07	.03	.06	.07	.19	.14	.04	.14	.14	119
.32	.22	.12	.21	.22	.36	.41	.24	.41	.41	120
.01	.01	.....	.01	.01	.00	.00	.....	.00	.00	122a
.01	.00	.....	.00	.00	.....	.00	.00	.00	.00	122b
.04	.01	.....	.01	.01	.....	.00	.....	.00	.00	122c
.10	.07	.03	.06	.07	.12	.03	.01	.03	.04	122d
.10	.03	.07	.03	.04	.06	.02	.04	.02	.02	122e
.13	.06	.00	.06	.06	.16	.05	.03	.05	.05	123
.08	.08	.08	.08	.08	.21	.07	.07	.07	.08	124a
.00	.02	.04	.02	.02	.00	.02	.03	.02	.03	124b
.07	.09	.18	.10	.09	.10	.04	.04	.04	.05	125a

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men.)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89-90	Bronchitis	1.14	1.03	0.34	0.83	2.21	0.60
91	Pneumonia, broncho	.10	.07	.15	.09	.03	.01
92a	Pneumonia, lobar	.14	.30	.21	.27	.33	.01
92b	Pneumonia, unclassified						
93a	Pleurisy, suppurative	.00		.57	.16		
93b	Pleurisy, serofibrinous	.01	.18	.31	.22		.04
93c	Pleura, other diseases of	.07	.22	.16	.20	.10	.06
96	Asthma	.13	.00	.23	.07	.21	.17
97	Pulmonary emphysema						.04
98	Lungs, other diseases of	.02	.21	.01	.15		
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99a	Pyorrhea alveolaris	.00	.05		.03	.00	.02
99b	Abscess periapical, focal infection from.						
99c	Mouth and adnexa, other diseases of.	.04	.31	.02	.23	.07	.03
101	Esophagus, diseases of						
102a	Ulcer of the stomach	.04	.01	.11	.04	.14	
102b	Gastro-enteroptosis	.02					
102c	Stomach, other diseases of	.14	.35	.42	.37	.78	.20
105a	Duodenal ulcer					.12	.06
105b	Diarrhea	.09	.12	.15	.13	.04	.02
105c	Enteritis and colitis	.09	.31	.08	.25	.09	.07
106	Ankylostomiasis (uncinariasis, hookworm).		.03	.08	.04		.00
107a	Ascaris lumbricoides		.01	.20	.06		
107b	Cestodes	.01		.03	.01	.01	
107c	Intestinal parasites, others	.02	.08	.04	.07		.01
108	Appendicitis (all)	.61	1.01	2.93	1.56	1.89	1.02
109a	Hernia	.18	.77	.13	.59	.50	
109b	Intestinal obstruction		.03		.02	.04	.20
110a	Fistula in ano		.08	.02	.06	.05	.06
110b	Intestines, other diseases of	.14	1.50	.89	1.33	.74	.62
113	Cirrhosis of the liver						
114	Cholelithiasis		.00		.00	.05	
115a	Cholecystitis	.01	.11	.04	.09	.13	.01
115b	Gall bladder and bile duct, other diseases of.	.02	.06	.03	.05	.02	.00
115c	Liver, other diseases of	.05	.04		.03		.07
117b	Peritoneal adhesions	.00	.06	.06	.06	.26	.06
118a	Pancreatitis						
118b	Visceroptosis						
118c	Digestive system, other diseases of	.05	.00		.00	.02	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).						
119	Nephritis, acute	.02	.03	.03	.03		
120	Nephritis, chronic	.38	.07	.02	.06	.39	.18
122a	Abscess perinephritic	.02					
122b	Nephroptosis						
122c	Hydronephrosis						
122d	Pyogenic infection of the kidneys		.00	.55	.16	.23	.02
122e	Kidney and adnexa, other diseases of.	.02	.03		.02	.06	.01
123	Nephrolithiasis	.13	.08		.06	.22	.03
124a	Cystitis	.11	.02	.03	.03	.05	.13
124b	Bladder, other diseases of					.02	
125a	Urethritis (nonvenereal)		.02		.02	.13	.04

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
3.07	3.09	0.10	0.06	0.10	0.79	0.16	2.45	89–90
.53	.55	.10	.30	.12	.07	.....	.26	91
.99	.99	.09	.22	.10	.33	.55	.16	92a
.06	.06	.00	.....	.00	.....	.....	.....	92b
.15	.15	.01	.04	.01	.06	.....	.....	93a
.36	.36	.02	.....	.02	.03	.....	.30	93b
.26	.26	.02	.04	.03	.07	.01	.03	93c
.10	.13	.00	.03	.01	.08	.07	.31	96
.....	.....	.....	.....	.....	.....	.....	.....	97
.....	.....	.....	.....	.....	.01	.....	.....	98
.43	.43	.00	.....	.00	.....	.....	.02	99a
.....	.....	.....	.....	.....	.....	.....	.....	99b
.29	.29	.00	.....	.00	.03	.05	.25	99c
.....	.....	.....	.....	.....	.....	.....	.....	101
.08	.08	.00	.02	.00	.....	.26	.05	102a
.01	.01	.....	.....	.....	.....	.....	.....	102b
.49	.49	.01	.00	.01	.24	.34	.23	102c
.....	.....	.....	.....	.....	.....	.....	.....	105a
.74	.74	.01	.....	.01	.08	.06	.01	105b
.61	.61	.01	.02	.02	.09	.01	.31	105c
.....	.....	.....	.....	.....	.24	.....	.98	106
.00	.00	.....	.....	.....	.27	.....	.01	107a
.00	.00	.....	.....	.....	.01	.....	.....	107b
.....	.....	.....	.....	.....	.06	.....	.17	107c
2.30	2.30	.07	.03	.06	.09	1.36	.20	108
1.42	1.45	.02	.02	.02	.06	.14	.69	109a
.02	.02	.00	.....	.00	.00	.00	.....	109b
.11	.11	.00	.....	.00	.01	.....	.03	110a
.67	.67	.01	.04	.02	.74	.17	1.11	110b
.....	.....	.00	.....	.00	.02	.02	.16	113
.00	.00	.....	.01	.00	.01	.....	.02	114
.07	.07	.00	.00	.00	.....	.00	.06	115a
.09	.09	.00	.....	.00	.02	.....	.12	115b
.04	.04	.....	.....	.....	.01	.....	.06	115c
.15	.15	.00	.....	.00	.02	.....	.....	117b
.....	.....	.....	.....	.....	.....	.....	.....	118a
.01	.01	.....	.....	.....	.....	.....	.01	118b
.....	.....	.00	.00	.00	.00	.....	.01	118c
.07	.07	.01	.04	.01	.02	.....	.....	119
.05	.05	.00	.....	.00	.01	.09	.12	120
.03	.03	.00	.....	.00	.....	.....	.....	122a
.02	.02	.....	.....	.....	.....	.....	.....	122b
.....	.....	.....	.....	.....	.01	.....	.....	122c
.08	.08	.....	.....	.....	.....	.....	.....	122d
.00	.00	.01	.....	.01	.01	.....	.00	122e
.06	.06	.01	.....	.01	.....	.....	.....	123
.04	.04	.00	.....	.00	.03	.01	.02	124a
.01	.01	.00	.....	.00	.00	.....	.....	124b
.04	.04	.00	.....	.00	.01	.08	.....	125a

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL)—continued.							
125b	Stricture (nonvenereal)	0.02	0.02	0.01	0.01	0.02	0.02	0.00
125c	Urethra, other diseases of	.00	.00	.01	.00	.00	.00	
126	Prostate, diseases of	.02	.02	.08	.02	.01	.02	
127a	Balanitis	.02	.02	.02	.02	.03	.02	.01
127b	Epididymitis (nonvenereal)	.05	.05	.05	.05	.04	.05	.02
127c	Hydrocele	.05	.05	.05	.05	.05	.05	.06
127d	Warts, external genital organs	.02	.02	.01	.02	.02	.02	.00
127e	Genito-urinary system, other diseases of (nonvenereal).	.08	.08	.06	.07	.10	.08	.06
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.							
142	Gangrene	.00	.00	.01	.00	.02	.00	.00
143a	Carbuncle	.03	.03	.06	.03	.01	.03	.03
143b	Furuncle	.16	.16	.11	.17	.04	.16	.25
144a	Abscess	.20	.19	.14	.19	.23	.20	.37
144b	Cellulitis	.14	.14	.11	.15	.07	.14	.23
145a	Trichophytoses	.05	.05	.02	.05	.03	.05	.29
145b	Nails, defects and diseases of	.07	.07	.03	.08	.01	.07	.08
145c	Ectoparasites	.01	.01	.00	.01	.00	.01	.01
145d	Clavus							
145e	Dermatitis	.01	.01	.02	.01	.00	.01	.02
145f	Eczema	.10	.10	.12	.10	.04	.10	.07
145g	Erythema	.02	.02	.01	.02	.01	.02	.00
145h	Herpes	.04	.04	.04	.03	.04	.04	.02
145i	Impetigo	.05	.05	.04	.05	.01	.05	.01
145j	Lichen	.00	.00	.00	.00	.00	.00	
145k	Nævus	.00	.00	.00	.00	.00	.00	
145l	Pityriasis	.01	.01	.01	.01	.00	.01	
145m	Psoriasis	.05	.05	.05	.06	.01	.05	.03
145n	Scabies	.44	.45	.51	.45	.10	.44	.08
145o	Skin and cellular tissue, other diseases of.	.26	.26	.22	.26	.21	.26	.19
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.							
146a	Osteomyelitis	.07	.07	.05	.07	.09	.07	.01
146b	Fractures, faulty union of	.05	.05	.09	.05	.03	.05	.04
146c	Bones, other diseases of	.07	.07	.09	.06	.06	.07	.06
147a	Ankylosis of joint	.03	.03	.03	.04	.01	.03	.00
147b	Loose bodies in joint	.00	.00	.00	.00	.00	.00	
147c	Synovitis	.04	.05	.10	.04	.04	.04	.01
147d	Floating cartilage	.01	.01	.01	.00	.00	.01	
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).	.02	.02	.01	.02	.01	.02	.01
149a	Hallux valgus	.03	.03	.02	.03	.03	.03	.02
149b	Hammertoe	.02	.02	.01	.02	.00	.02	
149c	Metatarsalgia	.01	.01	.02	.01	.01	.01	
149d	Myositis	.07	.07	.06	.07	.08	.07	.03
149e	Pes planus	.46	.47	.16	.49	.30	.49	.05
149f	Talipes	.01	.01		.01	.00	.01	
149g	Tenosynovitis	.02	.02	.03	.02	.00	.02	.01
149h	Organs of locomotion, other diseases of.	.30	.30	.23	.29	.30	.31	.08

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	576,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
0.03	0.01	0.02	0.01	0.02	0.00	0.02	0.02	0.02	0.02	125b
.02	.00	.00	.00	.00	.00	.00	.....	.00	.00	125c
.10	.02	.01	.02	.03	.08	.02	.01	.02	.02	126
.02	.03	.08	.03	.03	.03	.01	.01	.02	.02	127a
.03	.06	.07	.06	.06	.07	.04	.03	.05	.05	127b
.05	.07	.07	.07	.07	.05	.05	.04	.05	.05	127c
.01	.03	.04	.04	.03	.01	.01	.01	.01	.01	127d
.04	.08	.13	.08	.08	.07	.08	.10	.09	.09	127e
.03	.00	.04	.01	.01	.....	.00	.01	.00	.00	142
.06	.05	.01	.05	.05	.07	.03	.01	.03	.03	143a
.14	.23	.07	.22	.21	.10	.15	.03	.15	.14	143b
.14	.27	.32	.28	.26	.15	.15	.21	.17	.17	144a
.15	.18	.13	.18	.18	.07	.14	.05	.13	.13	144b
.03	.10	.03	.09	.09	.01	.02	.02	.02	.02	145a
.03	.13	.02	.12	.11	.03	.05	.01	.05	.05	145b
.00	.02	.00	.02	.02	.00	.01	.01	.01	.01	145c
										145d
.02	.02	.01	.01	.01	.02	.01	.00	.01	.01	145e
.15	.12	.07	.12	.12	.11	.10	.03	.10	.10	145f
.01	.03	.03	.03	.03	.01	.01	.01	.01	.01	145g
.03	.05	.05	.05	.05	.05	.03	.03	.03	.03	145h
.03	.06	.02	.05	.05	.06	.05	.01	.05	.05	145i
.00	.00	.00	.00	.00	.....	.00	.....	.00	.00	145j
.00	.01	.00	.00	.00	.....	.00	.....	.00	.00	145k
.01	.01	.00	.01	.01	.00	.01	.00	.01	.01	145l
.04	.04	.02	.04	.04	.07	.07	.01	.07	.07	145m
.49	.53	.07	.49	.49	.61	.47	.13	.48	.48	145n
.22	.32	.38	.33	.32	.25	.24	.14	.25	.25	145o
.06	.11	.25	.12	.12	.04	.05	.03	.05	.05	146a
.00	.05	.03	.05	.04	.00	.05	.03	.06	.05	146b
.11	.08	.04	.07	.08	.08	.06	.07	.07	.07	146c
.06	.06	.02	.06	.06	.00	.03	.01	.02	.02	147a
.01	.00	.00	.00	.00	.00	.00	.....	.00	.00	147b
.09	.05	.05	.05	.05	.11	.04	.04	.04	.05	147c
.01	.00	.02	.01	.01	.02	.01	.00	.00	.01	147d
.01	.03	.00	.03	.03	.01	.02	.01	.02	.02	147e
.02	.03	.02	.03	.03	.01	.04	.05	.04	.04	149a
.01	.02	.00	.02	.02	.02	.02	.01	.02	.02	149b
.02	.02	.01	.02	.02	.03	.01	.01	.01	.02	149c
.06	.04	.05	.04	.05	.06	.08	.11	.09	.09	149d
.12	.47	.27	.45	.43	.23	.54	.36	.55	.53	149e
.....	.01	.00	.01	.01	.....	.00	.....	.00	.00	149f
.03	.02	.01	.02	.02	.02	.02	.00	.02	.02	149g
.24	.35	.36	.35	.34	.25	.28	.31	.31	.31	149h

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men.)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	P ama.
			White.	Colored.	Total.	White.	White.
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL)—continued.						
125b	Stricture (nonvenereal)			0.01	0.00		
125c	Urethra, other diseases of		0.01		.01		0.00
126	Prostate, diseases of			.04	.01		
127a	Balanitis	0.01	.05	.03	.04	0.05	.00
127b	Epididymitis (nonvenereal)	.02	.05	.06	.05	.00	01
127c	Hydrocele	.01	.01		.01	.18	.02
127d	Warts, external genital organs			.17	.05	.02	
127e	Genito-urinary system, other diseases of (nonvenereal).	.04	.02	.04	.03	.03	.01
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.						
142	Gangrene						
143a	Carbuncle		.00		.00	.06	.00
143b	Furuncle	.03	.30	.27	.29	.23	.21
144a	Abscess	.09	.15	.11	.14	.28	.22
144b	Cellulitis	.01	.33	.09	.26	.20	.28
145a	Trichophytoses	.00	.35	.46	.39	.39	.30
145b	Nails, defects and diseases of	.04	.11	.02	.08	.35	.23
145c	Ectoparasites		.01		.01		.00
145d	Clavus						
145e	Dermatitis	.01	.02	.01	.01	.01	.09
145f	Eczema	.02	.13		.09	.13	.15
145g	Erythema		.00		.00	.02	.00
145h	Herpes	.01	.09	.01	.07	.04	.02
145i	Impetigo	.01	.01		.01	.08	.07
145j	Lichen						
145k	Nævus		.02		.01		
145l	Pityriasis		.01		.01	.02	.00
145m	Psoriasis	.01					.06
145n	Scabies	.05	.09		.07		.05
145o	Skin and cellular tissue, other diseases of.	.06	.43	.29	.39	.59	.60
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis		.09		.07	.05	.01
146b	Fractures, faulty union of		.02		.02	.13	
146c	Bones, other diseases of		.03	.10	.05	.32	.03
147a	Ankylosis of joint			.01	.00	.20	
147b	Loose bodies in joint						
147c	Synovitis	.08	.17		.12	.02	
147d	Floating cartilage						
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).		.15		.11	.06	.03
149a	Hallux valgus		.05		.04		.01
149b	Hammertoe					.10	.01
149c	Metatarsalgia						.00
149d	Myositis	.00	.02	.02	.02		
149e	Pes planus	.11	.76		.54	1.39	.18
149f	Talipes		.03		.02		
149g	Tenosynovitis	.04				.05	
149h	Organs of locomotion, other diseases of.	.04	.21	.12	.18	.60	.08

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
			0.01	0.00	0.00			125b
0.00	0.00							125c
.00	.00	0.00		.00				126
.01	.01	.00		.00	.00	0.01		127a
.03	.03	.00		.00	.00	.05	0.08	127b
.03	.03	.00		.00		.01	.37	127c
.01	.01				.00			127d
.11	.11	.02	.01	.02	.04	.01	.16	127e
					.00			142
.03	.03	.00		.00	.04		.01	143a
.28	.29	.01		.00	.29	.02	.23	143b
.44	.45	.01	.00	.01	.29	.37	.61	144a
.14	.15	.01	.00	.01	.22	.09	.31	144b
.03	.04				.37	.04	.07	145a
.12	.12				.07	.04	.10	145b
.02	.02	.00		.00	.01			145c
								145d
.08	.08	.00		.00	.01	.10		145e
.10	.10	.01		.01	.08	.05	.03	145f
.02	.02	.00		.00	.01			145g
.06	.06	.00		.00	.02	.02	.03	145h
.04	.04	.00		.00	.01	.07		145i
		.00		.00				145j
.03	.03							145k
.04	.04							145l
.01	.01				.04			145m
.35	.35	.03		.02	.04	.26	.02	145n
.45	.45	.01		.01	.17	.22	.18	145o
.02	.02					.06		146a
.14	.14	.00		.00		.24		146b
.01	.01	.00		.00	.06	.14	.01	146c
.07	.07				.00			147a
								147b
.04	.04	.00		.00	.02			147c
.03	.03							147d
.06	.06	.00		.00		.03	.01	147e
.02	.02				.03		.00	149a
.01	.01							149b
.04	.04							149c
.33	.33	.01		.01	.02	.01	.05	149d
1.08	1.09	.03		.02		.30	.01	149e
.00	.00							149f
.03	.03	.00		.00	.00	.02		149g
.63	.63	.01		.01	.08	.07	.06	149h

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.							
150	Congenital malformations	0.02	0.02	0.03	0.02	0.01	0.02	0.01
189	Not specified or ill-defined diseases	1.21	1.22	.89	1.15	1.74	1.24	.50
	Total for diseases	44.49	44.82	42.53	42.71	49.76	44.95	18.56
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.							
1	Bites	0.01	0.01	0.00	0.01	0.01	0.01	0.01
2	Burns	.12	.12	.14	.11	.11	.12	.05
3	Burns, chemical and X-ray	.03	.03	.03	.03	.03	.03	.00
4	Compression (brain)	.00	.00		.00		.00	
5	Concussion (brain)	.03	.03	.12	.02	.01	.02	.01
6	Contusion	.38	.39	.37	.36	.36	.39	.26
7	Crushing	.09	.09	.05	.10	.06	.09	.00
8	Dermatitis from traumatism	.01	.01	.01	.01	.01	.01	.01
9	Dislocation of joint	.13	.13	.21	.12	.08	.13	.13
10	Dislocation, articular, cartilage of knee.	.07	.07	.16	.07	.01	.07	.02
11	Drowning (except suicides)	.00	.00			.00	.00	
12	Epiphyseal separation	.00	.00	.02	.00		.00	
13	Eye and adnexa, traumatisms	.03	.03	.02	.03	.05	.03	.01
14	Foreign bodies	.03	.03	.01	.02	.04	.03	.02
15	Fracture, simple	2.17	2.19	2.96	2.16	1.22	2.14	.77
16	Fracture, compound	.81	.82	.97	.81	.62	.81	.19
17	Fracture, faulty union	.00	.00	.01	.00	.01	.00	
18	Gases, deleterious, absorption of	.02	.02	.02	.01	.02	.02	.00
19	Gunshot wound							
20	Hemorrhage and results	.01	.01	.01	.01	.00	.01	.02
21	Homicides	.00	.00		.00	.00	.00	
22	Poisoning by food	.01	.01	.01	.01	.00	.01	.00
23	Poisoning, other acute	.01	.01	.01	.01	.01	.01	.01
24	Secondary result of injury	.06	.06	.09	.05	.05	.06	.00
25	Sprain of joint	.63	.63	.68	.63	.40	.63	.28
26	Strain	.10	.10	.07	.09	.07	.10	.02
27	Suicide	.00	.00	.00	.00		.00	.00
28	Synovitis, traumatic, cause undetermined.	.11	.11	.17	.10	.08	.11	.00
29	Venomous bites and stings	.01	.01	.01	.01	.00	.01	.02
30	Wounds, multiple	.17	.17	.24	.16	.13	.16	.01
31	Wounds, penetrating	.19	.19	.11	.18	.18	.19	.01
33	Wounds, perforating	.07	.07	.05	.07	.06	.08	
34	Wounds, others	.79	.79	.47	.77	.77	.81	.71
35	Traumatisms, others	.32	.32	.38	.30	.27	.31	.24
	Total for diseases	44.49	44.82	42.53	42.71	49.76	44.95	18.56
	Total for external causes	6.40	6.44	7.41	6.28	4.68	6.38	2.81
	Grand total	50.89	51.26	49.94	48.99	54.44	51.33	21.37

TABLE XX.—*Day lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	576,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.03	0.03	15
1.07	2.34	4.52	2.53	2.41	.76	.59	.64	.65	.65	189
48.00	55.80	78.94	57.83	57.06	41.59	39.39	41.83	42.28	42.25	
										Office classification.
.00	.01	.00	.01	.01	.00	.01	.02	.01	.01	1
.09	.11	.14	.11	.11	.22	.13	.11	.14	.14	2
.02	.04	.08	.05	.04	.04	.02	.01	.02	.02	3
						.00		.00	.00	4
.11	.03	.00	.02	.03	.15	.03	.01	.03	.03	5
.30	.38	.38	.38	.37	.50	.39	.39	.43	.44	6
.04	.07	.04	.06	.06	.07	.12	.08	.12	.12	7
.05				.00	.03	.01	.01	.01	.01	8
.22	.12	.05	.12	.12	.19	.15	.10	.15	.15	9
.10	.06	.01	.05	.06	.25	.08	.02	.08	.08	10
							.00	.00	.00	11
.01	.01		.00	.01	.02	.00		.00	.00	12
.01	.03	.03	.03	.02	.03	.03	.07	.04	.04	13
.00	.03	.03	.03	.03	.00	.02	.05	.03	.03	14
2.46	1.96	1.16	1.89	1.94	3 86	2.51	1.39	2.51	2.56	15
.71	.64	.59	.62	.63	1.34	.98	.74	1.00	1.02	16
.02	.00	.00	.00	.01		.00	.01	.00	.00	17
.02	.01	.00	.01	.01	.02	.02	.04	.02	.02	18
										19
.02	.01	.00	.01	.01		.00	.00	.00	.00	20
	.00	.00	.00	.00		.00	.00	.00	.00	21
.01	.01	.00	.01	.01	.01	.00	.00	.00	.00	22
.01	.01	.00	.01	.01	.01	.01	.01	.01	.01	23
.09	.08	.04	.07	.07	.10	.04	.04	.05	.05	24
.61	.63	.50	.61	.61	.85	.68	.38	.69	.70	25
.08	.11	.07	.11	.11	.07	.09	.08	.10	.10	26
.00	.00		.00	.00	.00	.00		.00	.00	27
.14	.09	.07	.09	.10	.22	.12	.09	.12	.13	28
.00	.01	.00	.01	.01	.01	.01	.00	.01	.01	29
.29	.14	.07	.13	.14	.23	.19	.18	.20	.20	30
.07	.11	.14	.11	.11	.18	.23	.23	.26	.25	31
.06	.05	.09	.05	.05	.05	.09	.05	.10	.09	33
.51	.95	.93	.94	.91	.50	.73	.75	.79	.78	34
.33	.34	.21	.33	.33	.48	.28	.31	.31	.32	35
48.00	55.80	78.94	57.83	57.06	41.59	39.39	41.83	42.28	42.25	
6.36	6.03	4.54	5.90	5.93	9.16	6.98	5.17	7.23	7.33	
54.36	61.83	83.48	63.73	62.99	51.05	46.37	47.00	49.51	49.58	

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men.)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.						
150	Congenital malformations	0.00	0.01	.....	0.00	0.02	0.01
189	Not specified or ill-defined diseases	.52	.99	1.31	1.08	1.27	.77
	Total for diseases	12.26	40.76	35.19	39.17	33.59	22.81
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
1	Bites	.....	.01	.01	.01	.02	.00
2	Burns	.....	.04	.03	.03	.12	.07
3	Burns, chemical and X-ray	.....	.07	.04	.06	.02	.07
4	Compression (brain)	.....	.....	.....	.....	.....	.....
5	Concussion (brain)	.01	.....	.....	.....	.08	.....
6	Contusion	.12	.32	.43	.35	.79	.26
7	Crushing	.....	.....	.....	.....	.21	.....
8	Dermatitis from traumatism	.....	.07	.04	.06	.12	.05
9	Dislocation of joint	.24	.08	.27	.13	.06	.06
10	Dislocation, articular, cartilage of knee.	.....	.....	.....	.....	.02	.05
11	Drowning (except suicides)	.....	.....	.....	.....	.....	.....
12	Epiphyseal separation	.....	.....	.....	.....	.07	.....
13	Eye and annexa, traumatisms	.....	.02	.03	.02	.02	.01
14	Foreign bodies	.05	.04	.....	.03	.02	.....
15	Fracture, simple	.69	.79	.38	.67	2.47	1.62
16	Fracture, compound	.37	.28	.34	.30	1.21	.35
17	Fracture, faulty union	.....	.....	.....	.....	.....	.....
18	Gases, deleterious, absorption of	.....	.....	.....	.....	.....	.....
19	Gunshot wound	.....	.....	.....	.....	.....	.....
20	Hemorrhage and results	.....	.10	.....	.07	.....	.....
21	Homicides	.....	.....	.....	.....	.....	.....
22	Poisoning by food	.00	.23	.04	.18	.....	.01
23	Poisoning, other acute	.....	.02	.....	.01	.01	.01
24	Secondary result of injury	.04	.18	.52	.27	.12	.07
25	Sprain of joint	.07	.63	.69	.65	1.41	.50
26	Strain	.00	.11	.01	.08	.17	.12
27	Suicide	.....	.....	.....	.....	.....	.....
28	Synovitis, traumatic, cause undetermined.	.....	.17	.....	.12	.14	.02
29	Venomous bites and stings	.....	.04	.17	.08	.01	.03
30	Wounds, multiple	.....	.10	.00	.07	.01	.08
31	Wounds, penetrating	.00	.07	.....	.05	.01	.03
33	Wounds, perforating	.02	.13	.....	.09	.02	.13
34	Wounds, others	.07	.96	1.99	1.25	1.54	1.70
35	Traumatisms, others	.09	.44	.97	.59	.46	.49
	Total for diseases	12.26	40.76	35.19	39.17	33.59	22.81
	Total for external causes	1.76	4.87	5.96	5.18	9.11	5.76
	Grand total	14.02	45.63	41.15	44.35	42.70	28.57

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	International classification No.
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
0.01	0.01				0.01		0.04	150
1.09	1.11	0.09	0.08	0.09	.46	0.41	.62	189
67.71	68.34	2.16	1.77	2.12	15.26	16.59	29.74	
								Office classification.
.02	.02	.00		.00	.01		.01	1
.16	.16	.01		.01	.06	.04	.02	2
.04	.04	.00		.00			.02	3
								4
.00	.00	.00	.00	.00	.00	.06	.01	5
.16	.17	.03	.01	.03	.24	.25	.34	6
.05	.05	.01		.01		.02		7
.02	.02	.00		.00	.01			8
.10	.10	.02	.01	.02	.13	.10	.12	9
.21	.21	.00		.00			.14	10
								11
.01	.01							12
.11	.11	.00		.00	.00	.00	.03	13
.04	.04	.00		.00	.02	.04		14
1.87	1.94	.26	.13	.25	.40	1.38	1.63	15
1.27	1.28	.04	.07	.04	.11	.31	.39	16
								17
.00	.00				.00			18
								19
.00	.00	.00		.00	.02		.03	20
								21
.00	.00	.00		.00	.00			22
.00	.00				.02			23
.21	.21	.01	.02	.01	.00			24
1.10	1.12	.06	.07	.06	.28	.19	.39	25
.22	.23	.00		.00	.03		.03	26
					.00	.02		27
.24	.24	.01		.01	.00	.00	.01	28
.01	.01				.02	.03	.01	29
.21	.21	.01		.00	.00	.00	.05	30
.46	.51	.01		.01	.01	.04		31
.14	.14	.00	.03	.00				33
1.25	1.27	.08	.04	.08	.79	.22	.87	34
1.72	1.74	.02		.02	.22	.27	.26	35
67.71	68.34	2.16	1.77	2.12	15.26	16.59	29.74	
9.62	9.82	.58	.38	.56	2.38	2.96	4.34	
77.33	78.16	2.74	2.15	2.68	17.64	19.55	34.08	

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

Office classification.	Traumatisms.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.							
1	Knife	0.06	0.06	0.04	0.06	0.07	0.06	0.04
2	Pistol ball	.16	.16	.10	.16	.17	.16	.03
3	Rifle ball	.22	.22	.06	.23	.19	.23	.01
4	Shotgun	.02	.02	.01	.02	.01	.02	.....
5	Cutting and piercing instruments (other).	.19	.19	.10	.18	.20	.19	.22
6	Other military agents	.29	.29	.28	.27	.21	.29	.02
7	Sinking ships	.00	.00	.....	.00	.....	.00	.....
8	Air machines	.16	.16	1.45	.09	.00	.08	.....
9	Automobiles	.42	.42	.63	.43	.15	.41	.11
10	Motor cycles	.37	.38	.66	.39	.06	.36	.01
11	Railroad accidents	.23	.23	.16	.23	.19	.23	.04
12	Street car accidents	.03	.03	.03	.03	.01	.03	.02
13	Other vehicles	.29	.30	.19	.30	.26	.30	.13
14	Animals	.18	.18	.10	.20	.06	.19	.07
15	Conflagrations	.00	.00	.00	.00	.....	.00	.....
16	Crushing	.24	.24	.25	.24	.23	.24	.07
17	Electricity	.00	.00	.00	.00	.00	.00	.....
18	Fall	1.16	1.17	1.45	1.16	.71	1.15	.81
19	Falling objects	.18	.18	.08	.16	.33	.19	.14
20	Splinters	.01	.01	.00	.01	.02	.01	.03
21	Machinery	.03	.03	.01	.04	.03	.04	.02
22	Other industrial agents	.10	.10	.11	.09	.13	.10	.00
23	Excessive cold	.03	.03	.01	.03	.03	.03	.....
24	Excessive heat	.02	.02	.00	.02	.02	.02	.01
25	Land or snow slides	.00	.00	.....	.....	.....	.00	.....
26	Lightning	.00	.00	.....	.00	.....	.00	.....
27	Stones	.01	.01	.01	.01	.04	.01	.02
28	Strangulation	.00	.00	.....	.00	.....	.00	.....
29	Jumping	.05	.05	.04	.05	.03	.05	.01
30	Hot liquids	.05	.05	.04	.05	.04	.05	.03
31	Fire, conflagrations excepted	.02	.02	.00	.02	.02	.02	.01
32	Poison	.00	.00	.....	.00	.00	.00	.....
33	Athletic exercises	.60	.61	.50	.62	.35	.61	.26
34	Drilling and marching	.05	.04	.06	.04	.02	.04	.13
35	Fighting (brawls)	.06	.06	.00	.05	.08	.06	.02
36	Other external agents	1.19	1.20	1.02	1.13	1.03	1.21	.54
	Total	6.40	6.44	7.41	6.28	4.68	6.38	2.81

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	576,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	Office classification.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.01	0.07	0.09	0.07	0.06	0.09	0.05	0.07	0.06	0.06	1
.12	.10	.20	.11	.11	.07	.20	.17	.21	.20	2
.07	.13	.16	.13	.13	.06	.30	.22	.31	.30	3
.01	.04	.03	.04	.04	.....	.01	.00	.01	.01	4
.09	.22	.26	.22	.21	.11	.18	.19	.19	.18	5
.19	.13	.09	.13	.13	.41	.37	.29	.41	.41	6
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	7
1.40	.14	.00	.13	.23	1.71	.07	.00	.07	.14	8
.69	.50	.26	.48	.50	.67	.44	.12	.42	.43	9
.41	.32	.08	.30	.31	1.03	.48	.05	.44	.47	10
.09	.14	.13	.14	.14	.27	.30	.23	.31	.30	11
.05	.06	.02	.05	.05	.02	.02	.00	.02	.02	12
.09	.20	.20	.20	.20	.32	.39	.31	.40	.39	13
.08	.27	.12	.25	.24	.14	.18	.03	.17	.17	14
.....	.00	.....	.00	.00	.01	.00	.....	.00	.00	15
.18	.27	.22	.26	.26	.33	.25	.24	.26	.26	16
.00	.01	.....	.01	.00	.00	.00	.00	.00	.00	17
1.32	1.07	.64	1.03	1.05	1.75	1.27	.80	1.29	1.31	18
.07	.16	.18	.17	.16	.11	.17	.45	.21	.21	19
.00	.02	.04	.02	.02	.....	.01	.01	.01	.01	20
.01	.05	.03	.05	.04	.00	.03	.04	.03	.03	21
.09	.04	.08	.05	.05	.14	.13	.17	.14	.14	22
.00	.01	.01	.01	.01	.01	.02	.05	.02	.02	23
.01	.02	.04	.02	.02	.00	.01	.01	.01	.01	24
.....	.....	.....	.....	.....	.....	.....	.....	.00	.00	25
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	26
.00	.01	.02	.01	.01	.02	.01	.06	.02	.02	27
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	28
.04	.05	.02	.04	.04	.04	.06	.03	.06	.06	29
.04	.05	.05	.05	.05	.06	.06	.04	.06	.06	30
.....	.02	.01	.02	.02	.01	.02	.02	.02	.02	31
.....	.00	.....	.00	.00	.....	.00	.00	.00	.00	32
.43	.68	.54	.67	.65	.63	.65	.30	.65	.65	33
.08	.05	.03	.05	.05	.05	.05	.01	.04	.04	34
.00	.05	.10	.06	.05	.....	.05	.08	.06	.06	35
.77	1.14	.89	1.12	1.09	1.39	1.20	1.16	1.35	1.35	36
6.36	6.03	4.54	5.90	5.93	9.46	6.98	5.17	7.23	7.33	

The noneffective rates shown above are shown under the diagnosis.

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

Office classification.	Traumatisms.	Officers, other countries.	American troops in other countries (enlisted men.)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.						
1	Knife	0.00	0.04	0.17	0.08	0.24	0.10
2	Pistol ball	.22	.20	.01	.14	.16	.30
3	Rifle ball	.....	.06	.02	.05	.04	.11
4	Shotgun	.....	.14	.....	.10	.....	.....
5	Cutting and piercing instruments (other).	.01	.29	.27	.28	.41	.41
6	Other military agents	.07	.09	.....	.06	.01	.27
7	Sinking ships	.....	.....	.....	.....	.01	.....
8	Air machines	.18	.....	.....	.....	.02	.....
9	Automobiles	.00	.10	.02	.08	.62	.30
10	Motor cycles	.00	.02	.02	.02	.58	.14
11	Railroad accidents	.....	.00	.08	.02	.13	.02
12	Street car accidents	.....	.03	.....	.02	.03	.....
13	Other vehicles	.01	.05	.22	.10	.19	.10
14	Animals	.00	.08	.47	.19	.43	.19
15	Conflagrations	.....	.....	.....	.....	.....	.....
16	Crushing	.23	.11	.78	.30	.48	.34
17	Electricity	.....	.03	.....	.02	.00	.....
18	Fall	.45	.94	.74	.88	2.15	1.22
19	Falling objects	.....	.14	.00	.09	.25	.09
20	Splinters	.....	.....	.02	.01	.05	.01
21	Machinery	.....	.....	.01	.00	.12	.10
22	Other industrial agents	.05	.08	.....	.06	.08	.04
23	Excessive cold	.....	.....	.....	.....	.....	.....
24	Excessive heat	.....	.02	.00	.02	.01	.02
25	Land or snow slides	.....	.....	.....	.....	.....	.....
26	Lightning	.....	.....	.....	.....	.....	.....
27	Stones	.....	.....	.04	.01	.04	.02
28	Strangulation	.....	.....	.....	.....	.....	.....
29	Jumping	.....	.00	.04	.01	.18	.03
30	Hot liquids	.....	.02	.01	.02	.05	.03
31	Fire, conflagrations excepted	.....	.01	.01	.01	.05	.02
32	Poison	.....	.....	.....	.....	.....	.....
33	Athletic exercises	.14	.76	.18	.59	.96	.46
34	Drilling and marching	.01	.01	.49	.15	.13	.03
35	Fighting (brawls)	.....	.07	.24	.12	.06	.16
36	Other external agents	.38	1.62	2.11	1.76	1.63	1.23
	Total	1.76	4.87	5.96	5.18	9.11	5.76

The noneffective rates shown above are shown under the diagnosis.

TABLE XX.—*Days lost, United States Army, 1919*—Continued.

NONEFFECTIVE RATES PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			Office classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Total.	White.	Colored.	Total.				
0.02	0.02	0.00	.....	0.00	0.04	0.06	0.05	1
.19	.19	.00	.....	.00	.02	.....	.09	2
.83	.84	.00	0.07	.01	.02	.01	.....	3
.02	.02	.....	.....	.....	.....	.....	.....	4
.21	.21	.02	.02	.02	.28	.05	.13	5
.69	.76	.01	.03	.01	.02	.01	.04	6
.00	.00	.00	.....	.00	.....	.....	.....	7
.08	.08	.....	.....	.....	.....	.....	.....	8
.10	.10	.....	.....	.....	.01	.18	.47	9
.06	.06	.00	.....	.00	.00	.07	.02	10
.50	.50	.00	.....	.00	.01	.17	.06	11
.....	.....	.....	.....	.....	.04	.00	.....	12
.21	.21	.....	.....	.....	.05	.16	.44	13
.14	.14	.00	.....	.00	.09	.02	.04	14
.....	.....	.....	.....	.....	.....	.....	.....	15
.18	.18	.01	.00	.00	.08	.03	.07	16
.....	.....	.....	.....	.....	.....	.....	.....	17
1.99	1.99	.33	.09	.31	.64	1.08	1.24	18
.23	.23	.04	.01	.04	.12	.06	.28	19
.00	.00	.....	.....	.....	.00	.15	.01	20
.00	.00	.00	.00	.00	.....	.04	.06	21
.03	.03	.00	.....	.00	.00	.....	.00	22
.96	.99	.....	.....	.....	.....	.....	.....	23
.09	.09	.01	.....	.00	.01	.02	.01	24
.....	.....	.....	.....	.....	.....	.....	.....	25
.....	.....	.....	.....	.....	.....	.....	.....	26
.00	.00	.....	.....	.....	.02	.02	.00	27
.....	.....	.....	.....	.....	.....	.....	.....	28
.03	.03	.01	.01	.01	.01	.....	.....	29
.06	.06	.00	.....	.00	.04	.02	.01	30
.00	.00	.00	.....	.00	.01	.....	.00	31
.....	.....	.....	.....	.....	.....	.....	.....	32
.63	.63	.02	.04	.02	.12	.39	.68	33
.05	.05	.....	.05	.01	.19	.00	.01	34
.10	.10	.01	.....	.01	.02	.01	.01	35
2.20	2.29	.11	.06	.10	.54	.42	.65	36
9.62	9.82	.58	.38	.56	2.38	2.96	4.34	

TABLE XXI.—*Discharges for disability, United States Army, 1919.*

ABSOLUTE NUMBERS.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).								
1	Typhoid fever	17	17		17			17	
4	Malarial fevers (all)	2	2		2			2	
6	Measles (all)	30	30		30			30	
7	Scarlet fever	12	12		12			12	
9	Diphtheria and results	39	39	1	38			38	
10	Influenza (all)	599	598	16	529	37	16	582	1
14	Dysentery (all)	23	23	1	21	1		22	
17	Leprosy	2	2		2			2	
18	Erysipelas	3	3	1	2			2	
19c	Carrier, meningococcus	5	5		5			5	
19g	Meningitis, cerebrospinal (epidemic).	143	143	2	131	6	4	141	
19h	Mumps	13	13		11	2		13	
19k	Poliomyelitis, anterior, acute.	10	10		10			10	
19l	Trench fever	6	6		6			6	
19m	Trench mouth	2	2		2			2	
19p	Epidemic diseases, others.	9	9		9			9	
25a	Trench foot	43	43	2	29	9	3	41	
25b	Mycosis (others)	2	2		2			2	
26	Pellagra	2	2		2			2	
27	Beriberi	7							7
47	Acute articular rheumatism.	51	51	1	46	4		50	
	II. TUBERCULOSIS.								
28a	Tuberculosis of lungs	6,439	6,246	138	5,381	566	161	6,108	193
28b	Suspected tuberculosis	57	57	4	45	7	1	53	
29	Acute miliary tuberculosis.	4	4	1	3			3	
30–35	Tuberculosis, others	202	199	3	156	30	10	196	3
	Tuberculosis (all)	6,702	6,506	146	5,585	603	172	6,360	196
	III. VENEREAL DISEASES (ALL).								
37	Syphilis (all)	472	469	11	312	128	18	458	3
37a	Syphilis, hereditary	6	6		5		1	6	
37c	Syphilis, secondary	50	50	2	33	15		48	
37d	Syphilis, tertiary	375	373	7	251	103	12	366	2
37e	Syphilis, unclassified	41	40	2	23	10	5	38	1
38a	Chancroidal infection	25	25		6	19		25	
38b	Gonococcus infection	538	537	6	193	338		531	1
	Venereal (all)	1,035	1,031	17	511	485	18	1,014	4
	IV. GENERAL DISEASES (OTHER).								
36	Rickets	46	46		44	1	1	46	
39–45	Cancer and other malignant tumors.	27	27	3	20	3	1	24	
46	Tumors, benign	50	50	1	44	2	3	49	
48a	Arthritis	1,273	1,269	58	1,082	100	29	1,211	4
49	Scurvy								
50	Diabetes, mellitus	131	131	7	110	10	4	124	
51a	Exophthalmic goiter (hyperthyroidism).	518	518	0	487	7	15	509	
53a	Leukemia	3	3		3			3	
53b	Hodgkin's disease	12	12		11	1		12	

TABLE XXI.—*Discharges for disability, United States Army, 1919.*

ABSOLUTE NUMBERS.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
	Enlisted men.					Enlisted men.					
Officers.	White.	Colored.	Total.	Total officers and enlisted men.	Officers.	White.	Colored.	Color not stated.	Total.	Total officers and enlisted men.	
.....	5	.....	5	5	.....	12	.....	.....	12	12	1
.....	2	.....	2	2	.....	.....	.....	.....	.....	.....	4
.....	29	.....	29	29	.....	1	.....	.....	1	1	6
.....	11	.....	11	11	.....	1	.....	.....	1	1	7
.....	13	.....	13	13	1	22	.....	.....	22	23	9
6	333	17	350	356	10	189	20	6	215	225	10
1	13	.....	13	14	.....	8	1	.....	9	9	14
.....	1	.....	1	1	.....	1	.....	.....	1	1	17
1	2	.....	2	3	.....	.....	.....	.....	.....	.....	18
.....	5	.....	5	5	.....	.....	.....	.....	.....	.....	19c
.....	60	3	63	63	2	70	3	3	76	78	19g
.....	6	2	8	8	.....	4	.....	.....	4	4	19h
.....	5	.....	5	5	.....	4	.....	.....	4	4	19k
.....	3	.....	3	3	.....	3	.....	.....	3	3	19l
.....	2	.....	2	2	.....	.....	.....	.....	.....	.....	19m
.....	6	.....	6	6	.....	3	.....	.....	3	3	19p
.....	12	2	14	14	.....	17	7	2	26	26	25a
.....	2	.....	2	2	.....	.....	.....	.....	.....	.....	25b
.....	2	.....	2	2	.....	.....	.....	.....	.....	.....	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
1	32	3	35	36	.....	13	1	.....	14	14	47
118	4,137	394	4,531	4,649	20	1,205	169	7	1,381	1,401	28a
3	21	1	22	25	1	23	6	.....	29	30	28b
.....	2	.....	2	2	1	1	.....	.....	1	2	29
2	103	18	121	123	1	49	11	1	61	62	30–35
123	4,263	413	4,676	4,799	23	1,278	186	8	1,472	1,495	
6	236	94	330	336	4	74	34	4	112	116	37
.....	3	.....	3	3	.....	2	.....	1	3	3	37a
1	28	13	41	42	.....	5	2	.....	7	7	37c
4	185	72	257	261	3	64	31	2	97	100	37d
1	20	9	29	30	1	3	1	1	5	6	37e
.....	5	19	24	24	.....	1	.....	.....	1	1	38a
4	153	317	470	474	2	39	21	.....	60	62	38b
10	394	430	824	834	6	111	55	4	173	179	
.....	30	1	31	31	.....	11	.....	.....	11	11	36
2	16	1	17	19	1	4	2	.....	6	7	39–45
1	30	2	32	33	.....	13	.....	.....	13	13	46
40	755	77	832	872	18	322	23	3	348	366	48a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49
6	70	4	74	80	1	39	6	1	46	47	50
7	373	6	379	386	2	104	1	2	107	109	51a
.....	1	.....	1	1	.....	2	.....	.....	2	2	53a
.....	7	.....	7	7	.....	3	1	.....	4	4	53b

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
4	Malarial fevers (all)						
6	Measles (all)						
7	Scarlet fever						
9	Diphtheria and results						
10	Influenza (all)						1
14	Dysentery (all)						
17	Leprosy						
18	Erysipelas						
19g	Meningitis, cerebrospinal (epidemic).						
19h	Mumps						
19k	Poliomyelitis, anterior, acute.						1
19l	Trench fever						
19m	Trench mouth						
19p	Epidemic diseases, others						
25a	Trench foot	2					
25b	Mycosis (others)						
26	Pellagra						
27	Beriberi						
47	Acute articular rheumatism.						
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs		18	2	20	7	
28b	Suspected tuberculosis						
29	Acute miliary tuberculosis.						
30–35	Tuberculosis, others		1	1	2	1	1
	Tuberculosis (all)		19	3	22	8	1
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)	1					1
37a	Syphilis, hereditary						
37c	Syphilis, secondary	1					
37d	Syphilis, tertiary						1
37e	Syphilis, unclassified						
38a	Chancroidal infection						
38b	Gonococcus infection					1	
	Venereal (all)	1				1	1
	IV. GENERAL DISEASES (OTHER).						
36	Rickets						
39–45	Cancer and other malignant tumors.						
46	Tumors, benign						
48a	Arthritis						
50	Diabetes, mellitus						
51a	Exophthalmic goiter (hyperthyroidism).						1
53a	Leukemia						
53b	Hodgkin's disease						

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Rican.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
									1
									4
									6
									7
			3		3				9
2	10	12	4		4		1		10
									14
									17
									18
1	1	2							19
			1		1				19h
									19k
									19l
									19m
									19p
	1	1							25a
									25b
									26
								7	27
1		1							47
13	154	167	1	1	2	149	30	14	28a
1	1	2							28b
									29
1	9	10					2	1	30–35
15	164	179	1	1	2	149	32	15	
1	14	15				1	1	1	37
									37a
									37c
1	10	11					1	1	37d
	4	4				1			37e
									38a
						1			38b
1	14	15				2	1	1	
3	1	4							36
	1	1							39–45
1	3	4							46
5	26	31				1	3		48a
1	3	4							50
9	13	22							51a
									53a
1		1							53b

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,947	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	IV. GENERAL DISEASES (OTHER)—continued.								
88	Goiter, simple	80	80	3	75	1	1	77	
116	Spleen, diseases of	4	4	1	3			3	
53c	Other diseases of the ductless glands.	14	14		14			14	
54	Anemia, chlorosis	10	10		10			10	
55a	Hemophilia	2	2		2			2	
55c	Purpura	2	2		2			2	
55d	Muscular rheumatism	32	32	1	23	7	1	31	
55e	General diseases, others	26	26	1	23	2		25	
56a	Alcoholism (acute or chronic).	82	82	1	78	1	2	81	
56b	Drug addiction	123	122	2	97	16	7	120	1
57-59	Poisoning, chronic	2	2		2			2	
	V. NERVOUS SYSTEM, DISEASES OF (ALL).								
60	Encephalitis	11	11	2	9			9	
61	Meningitis, simple	10	10		9	1		10	
62	Locomotor ataxia	20	20	1	18	1		19	
63a	Multiple sclerosis	17	17		17			17	
63b	Spinal cords, diseases of (others).	56	56	3	48	1	4	53	
64	Apoplexy	29	29		24	4	1	29	
66a	Facial paralysis	39	39	2	31	4	2	37	
66b	Paraplegia	6	6		4	1	1	6	
66c	Paralysis without specified cause (others).	98	97	2	72	1	22	95	1
69	Epilepsy	762	761	2	653	87	19	759	1
74a	Jacksonian epilepsy	9	9		6	3		9	
74b	Neurasthenia	757	757	33	691	12	21	724	
74c	Enuresis	55	55		44	7	4	55	
74d	Neurosis	18	18	1	15		2	17	
74e	Neuro-circulatory asthenia (disordered action of the heart).	266	266	3	246	11	6	263	
74f	Shell shock (cause not given).	50	50	3	46		1	47	
72	Chorea	12	12		12			12	
73a	Hysteria and results (psychoses excepted).	506	506	11	441	32	22	495	
73b	Neuralgia	16	16		9	5	2	16	
73c	Neuritis	157	157	15	133	5	4	142	
73d	Speech, defective	10	10	1	9			9	
74g	Nervous system, other diseases of.	67	67	8	57		2	59	
	VI. MENTAL ALIENATION.								
67	General paralysis of the insane.	78	78	1	65	8	4	77	
68a	Constitutional psychopathic states.	801	801	3	755	20	23	798	
68b	Mental deficiency	1,343	1,335		1,144	154	37	1,335	8
68c	Malingering								
68d	Dementia præcox	1,883	1,871	13	1,654	146	58	1,858	12
68e	Psychasthenia	78	78	4	71		3	74	
68f	Psychoneurosis	282	282	9	246	13	14	273	
68g	Psychosis, alcoholic	62	62		61	1		62	
68h	Psychosis, manic depressive.	749	749	15	671	43	20	734	
68i	Psychosis, others	445	445	7	393	30	15	438	

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556
	Enlisted men.					Enlisted men.				
Officers.	White.	Colored.	Total.	Total officers and enlisted men.	Officers.	White.	Colored.	Color not stated.	Total.	Total officers and enlisted men.
	51	1	52	52	3	23			23	26
1	3		3	4						
	13		13	13		1			1	1
	7		7	7		3			3	3
	1		1	1		1			1	1
	1		1	1		1			1	1
1	17	7	24	25		5			5	5
	13	1	14	14	1	9	1		10	11
	37	1	38	38	1	34			34	35
2	83	14	97	99		13	2		15	15
	2		2	2						
1	4		4	5	1	5			5	6
	8	1	9	9		1			1	1
1	10	1	11	12		8			8	8
	8		8	8		8			8	8
3	33	1	34	37		14			14	14
	14	4	18	18		10			10	10
2	18	3	21	23		12	1		13	13
	3		3	3		1	1		2	2
	50	1	51	51	1	21		1	22	23
2	403	41	444	446		242	46	4	292	292
	3	3	6	6		3			3	3
25	514	9	523	548	6	168	3	3	174	180
	36	7	43	43		8			8	8
	14		14	14	1	1			1	2
1	175	8	183	184	1	69	3		72	73
2	29		29	31	1	17			17	18
	9		9	9		3			3	3
7	289	22	311	318	4	150	10	3	163	167
	2	5	7	7		7		1	8	8
10	86	2	88	98	4	46	3		49	53
	8		8	8	1					1
6	43		43	49	2	14			14	16
1	39	7	46	47		26	1		27	27
3	472	11	483	486		269	7	1	277	277
	710	79	789	789		409	74	1	484	484
9	993	79	1,072	1,081	4	644	65	9	718	722
2	43		43	45	2	28			28	30
1	153	6	159	163	4	91	7	3	101	105
	33		33	33		26	1		27	27
8	414	19	433	441	6	249	24	4	277	283
6	230	16	246	252	1	159	14	4	177	178

International classification No.
88
116
53c
54
55a
55c
55d
55e
56a
56b
57-59
60
61
62
63a
63b
64
66a
66b
66c
69
74a
74b
74c
74d
74e
74f
72
73a
73b
73c
73d
74g
67
68a
68b
68c
68d
68e
68f
68g
68h
68i

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	IV. GENERAL DISEASES (OTHER)—continued.						
53	Goiter, simple						
116	Spleen, diseases of						
53c	Other diseases of the ductless glands.						
54	Anemia, chlorosis						
55a	Hemophilia						
55c	Purpura						
55d	Muscular rheumatism						
55e	General diseases, others						
56a	Alcoholism (acute or chronic)					1	
56b	Drug addiction						
57–59	Poisoning, chronic						
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
62	Locomotor ataxia						
63a	Multiple sclerosis						
63b	Spinal cord, diseases of (others)						1
64	Apoplexy						
66a	Facial paralysis						
66b	Paraplegia						
66c	Paralysis without specified cause (others)	1					
69	Epilepsy					2	
74a	Jacksonian epilepsy						
74b	Neurasthenia	2					
74c	Enuresis						
74d	Neurosis						
74e	Neuro-circulatory asthenia (disordered action of the heart)	1					
74f	Shell shock (cause not given)						
72	Chorea						
73a	Hysteria and results (psychoses excepted)					1	
73b	Neuralgia						
73c	Neuritis	1					
73d	Speech, defective						
74g	Nervous system, other diseases of						
	VI. MENTAL ALIENATION.						
67	General paralysis of the insane						
68a	Constitutional psychopathic states			2	2	3	3
68b	Mental deficiency		2	1	3	4	
68c	Malingering						
68d	Dementia præcox			2	2	1	8
68e	Psychasthenia						
68f	Psychoneurosis	1					
68g	Psychosis, alcoholic						2
68h	Psychosis, manic depressive	1	1		1		
68i	Psychosis (others)					1	1

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
1	1	2							53
									116
									53c
									54
									55a
									55c
1	1	2							55d
1		1							55e
6	2	8							56a
1	7	8					1		56b
									57–59
									60
									61
									62
1		1							63a
	4	4							63b
	1	1							64
1	2	3							66a
	1	1							66b
1	21	22				1			66c
6	15	21				1			69
									74a
9	18	27							74b
	4	4							74c
	2	2							74d
1	6	7	1		1				74e
	1	1							74f
									72
1	19	20							73a
	1	1							73b
1	4	5							73c
1		1							73d
	2	2							74g
	4	4							67
7	22	29	1		1				68a
18	36	54	1		1	2	6		68b
									68c
6	49	55	2		2	8	3	1	68d
	3	3							68e
2	11	13							68f
									68g
7	16	23							68h
2	11	13							68i

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	VII. EYES AND THEIR ANNEXA, DISEASES OF.								
75a	Refractive errors (all)	260	258	7	229	13	9	251	2
	(1) Astigmatism	50	49	3	41	3	2	46	1
	(2) Hyperopia	13	13		13			13	
	(3) Myopia	54	54	2	49	3		52	
	(4) Defective vision (cause not stated).	143	142	2	126	7	7	140	1
75b	Strabismus	19	18		17		1	18	1
75c	Leucoma	29	29	1	25	3		28	
75d	Cataract	58	58		54	4		58	
75e	Trachoma	165	164		157	3	4	164	1
75f	Conjunctivitis (others)	35	35	3	30	2		32	
75g	Pterygium	9	9		9			9	
75h	Amblyopia	64	64		59	5		64	
75j	Choroiditis	65	65	2	55	7	1	63	
75k	Iritis	53	53	2	40	6	5	51	
75l	Keratitis	92	91	4	75	10	2	87	1
75m	Retinitis	55	55	1	51	1	2	54	
75n	Nystagmus	9	9		8	1		9	
75o	Glaucoma	13	13	2	10	1		11	
75p	Eyelids, diseases of	11	11		10	1		11	
75r	Eyes and annexa, other diseases of.	229	227	4	197	19	7	223	2
	VIII. EAR, DISEASES OF.								
76a	Otitis media	1,309	1,307	77	1,169	27	34	1,230	2
76b	Mastoiditis	52	52	1	46	3	2	51	
76c	Otitis, external	2	2		2			2	
76d	Defective hearing (cause not stated).	154	154	24	125	4	1	130	
76e	Ear, other diseases of	29	28	1	26	1		27	1
	IX. NASAL FOSSÆ, DISEASES OF.								
86b	Deviation of nasal septum and spurs.	15	15		14		1	15	
86c	Nose, external deformity of.								
86d	Turbinate hypertrophy	47	46	1	41	3	1	45	1
86e	Sinusitis (all)	112	112	16	88	4	4	96	
86f	Polypus, nasal	2	2	1	1			1	
86h	Rhinitis (cause not stated).	16	16	1	15			15	
86i	Nasal fossæ, other diseases of.	7	7		7			7	
	X. THROAT, DISEASES OF.								
87a	Laryngitis, acute catarrhal	37	37	1	33	1	2	36	
87b	Larynx, other diseases of	1	1		1			1	
100a	Tonsillitis, acute	41	41		41			41	
100b	Tonsillitis, chronic	31	31	4	25	2		27	
100c	Tonsils, focal infection from.	3	3		2		1	3	
100d	Pharyngitis, acute catarrhal.	13	13	1	12			12	
100e	Pharynx, other diseases of.	3	3	2	1			1	

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	516,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
4	170	10	180	184	3	54	3	2	59	62	75a
1	27	2	29	30	2	14	1		15	17	(1)
	9		9	9		3			3	3	(2)
1	38	2	40	41	1	11	1		12	13	(3)
2	96	6	102	104		26	1	2	29	29	(4)
	13		13	13		2			2	2	75b
1	19	2	21	22		6	1		7	7	75c
	38	3	41	41		16	1		17	17	75d
	95	1	96	96		61	2	1	64	64	75e
2	26		26	28	1	4	2		6	7	75f
	5		5	5		4			4	4	75g
	50	5	55	55		8			8	8	75h
1	38	6	44	45	1	17	1		18	19	75j
1	25	5	30	31	1	12	1	1	14	15	75k
2	40	3	43	45	2	33	7		40	42	75l
1	34	1	35	36		16			16	16	75m
	6	1	7	7		2			2	2	75n
1	8		8	9	1	1	1		2	3	75o
	7	1	8	8		3			3	3	75p
1	155	13	168	169	3	42	6	1	49	52	75r
57	793	19	812	869	17	347	8	2	357	374	76a
1	30	1	31	32		16	2	1	19	19	76b
	1		1	1		1			1	1	76c
23	98	3	101	124	1	24	1		25	26	76d
1	17		17	18		8			8	8	76e
	10		10	10		4		1	5	5	86b
											86c
1	28	3	31	32		12			12	12	86d
5	54	2	56	61	10	32	2	2	36	46	86e
1	1		1	2							86f
1	11		11	12		3			3	3	86h
	6		6	6		1			1	1	86i
1	24	1	25	26		7			7	7	87a
	1		1	1							87b
	17		17	17		10			10	10	100a
3	17	1	18	21	1	8	1		9	10	100b
	1		1	1		1			1	1	100c
1	11		11	12		1			1	1	100d
1	1		1	2	1					1	100e

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	VII. EYES AND THEIR ANNEXA, DISEASES OF.						
75a	Refractive errors (all)						
	(1) Astigmatism						
	(2) Hyperopia						
	(3) Myopia						
	(4) Defective vision, cause not stated.						
75b	Strabismus						
75c	Leucoma						
75d	Cataract						
75e	Trachoma						
75f	Conjunctivitis (others)						
75g	Pterygium						
75h	Amblyopia						
75i	Amaurosis						
75j	Choroiditis						
75k	Iritis						
75l	Keratitis						
75m	Retinitis						
75n	Nystagmus						
75o	Glaucoma		1		1		
75p	Eyelids, diseases of						
75r	Eyes and annexa, other diseases of.						
	VIII. EAR, DISEASES OF.						
76a	Otitis media	3	1		1		2
76b	Mastoiditis						
76c	Otitis externa						
76d	Defective hearing (cause not stated).						
76e	Ear, other diseases of			1	1	1	
	IX. NASAL FOSSÆ, DISEASE OF.						
86b	Deviation of nasal septum and spurs.						
86c	Nose, external deformity of						
86d	Turbinate hypertrophy						1
86e	Sinusitis (all)	1				1	
86f	Polypus nasal						
86h	Rhinitis (cause not stated).						
86i	Nasal fossæ, other diseases of.						
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal					1	
87b	Larynx, other diseases of						
100a	Tonsillitis, acute						
100b	Tonsillitis, chronic						
100c	Tonsils, focal infection from						
100d	Pharyngitis, acute catarrhal.						
100e	Pharynx, other diseases of						

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
5	7	12				1		1	75a
	2	2				1			(1)
1		1							(2)
									(3)
4	5	9						1	(4)
2	1	3					1		75b
									75c
									75d
1	3	4					1		75e
									75f
									75g
1		1							75h
									75i
	1	1							75j
	4	4	3		3				75k
2	2	4					1		75l
1	2	3							75m
									75n
									75o
									75p
	6	6					2		75r
25	32	57	1		1		2		76a
	1	1							76b
									76c
3	1	4							76d
						1			76e
									86b
									86c
	1	1						1	86d
1	2	3							86e
									86f
1		1							86h
									86i
1	2	3							87a
									87b
14		14							100a
	1	1							100b
									100c
									100d
									100e

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XI. CIRCULATORY SYSTEM, DISEASES OF.								
77	Pericarditis	12	12	.....	9	2	1	12	.....
78	Endocarditis, acute	6	6	.....	4	2	.....	6	.....
79a	Valvular diseases of the heart.	2,174	2,160	62	1,828	214	56	2,098	14
	(1) Aortic insufficiency.	294	293	15	242	30	6	278	1
	(2) Aortic stenosis	28	28	1	25	2	.....	27	.....
	(3) Mitral insufficiency	1,374	1,365	34	1,144	150	37	1,331	9
	(4) Mitral stenosis	326	323	10	283	23	7	313	3
	(5) Combined lesions, mitral aortic.	125	124	2	112	6	4	122	1
	(6) Pulmonic lesions	2	2	.....	2	.....	.....	2	.....
	(8) Valvular lesions, unclassified.	25	25	.....	20	3	2	25	.....
79b	Cardiac hypertrophy	70	70	1	58	10	1	69	.....
79c	Cardiac dilatation	15	15	1	11	.....	3	14	.....
79d	Myocarditis and myocardial insufficiency.	286	285	15	237	24	9	270	1
79e	Heart, other organic diseases of.	93	93	.....	76	14	3	93	.....
80	Angina pectoris	3	3	.....	2	.....	1	3	.....
81a	Aneurisms	18	18	1	13	4	.....	17	.....
81b	Arterial sclerosis and hypertension.	33	33	2	26	4	1	31	.....
81c	Aortitis	7	7	1	4	2	.....	6	.....
81d	Arteries, other diseases of	1	1	.....	.....	1	.....	1	.....
82	Embolism and thrombosis	20	20	1	16	3	.....	19	.....
83a	Hemorrhoids	53	53	2	49	1	1	51	.....
83b	Varicocele	68	68	1	63	3	1	67	.....
83c	Varicose veins	264	264	16	232	10	6	248	.....
83d	Phlebitis	114	114	5	106	1	2	109	.....
84a	Status lymphaticus	1	1	.....	1	.....	.....	1	.....
84b	Lymphatic system, other diseases of.	50	50	2	34	12	2	48	.....
85a	Cardiac arrhythmias	62	62	.....	56	4	2	62	.....
85b	Cardiac murmurs, not organic.	10	10	2	7	1	.....	8	.....
85c	Cardiac disorders, functional.	190	190	6	168	15	1	184	.....
85d	Bradycardia	.....	.....	.....	.....	.....	.....	.....	.....
85e	Heart block	1	1	.....	1	.....	.....	1	.....
85f	Tachycardia	117	117	3	108	4	2	114	.....
85g	Hemorrhage	3	3	.....	2	.....	1	3	.....
85h	Circulatory system, other diseases of.	1	1	.....	1	.....	.....	1	.....
	XII. RESPIRATORY SYSTEM, DISEASES OF.								
89-90	Bronchitis	729	727	47	629	29	22	680	2
91	Pneumonia, broncho	190	190	8	166	13	3	182	.....
92a	Pneumonia, lobar	215	215	5	177	31	2	210	.....
92b	Pneumonia, unclassified	77	77	2	62	7	6	75	.....
93a	Pleurisy, suppurative	555	555	6	487	47	15	549	.....
93b	Pleurisy, serofibrinous	277	277	7	247	21	2	270	.....
93c	Pleura, other diseases of	734	733	13	629	50	41	720	1
96	Asthma	313	309	10	267	27	5	299	4
97	Pulmonary emphysema	31	31	1	26	3	1	30	.....
98	Lungs, other diseases of	9	9	.....	6	2	1	9	.....

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	516,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
.....	5	2	7	7	.....	4	.....	.....	4	4	77
.....	1	2	3	3	.....	2	.....	.....	2	2	78
37	1,293	127	1,420	1,457	22	504	87	14	605	627	79a
10	187	24	211	221	4	52	6	6	64	68	(1)
1	18	2	20	21	.....	7	.....	.....	7	7	(2)
18	756	72	828	846	14	367	78	8	453	467	(3)
6	222	22	244	250	4	57	1	.....	58	62	(4)
2	89	4	93	95	.....	21	2	.....	23	23	(5)
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	(6)
.....	20	3	23	23	.....	.....	.....	.....	.....	.....	(8)
1	49	9	58	59	.....	7	1	.....	8	8	79b
1	7	.....	7	8	.....	4	.....	.....	4	4	79c
10	162	17	179	189	5	73	7	1	81	86	79d
.....	55	10	65	65	.....	21	4	.....	25	25	79e
.....	.....	.....	.....	.....	.....	2	.....	.....	2	2	80
.....	9	4	13	13	1	4	.....	.....	4	5	81a
1	19	3	22	23	1	6	1	.....	7	8	81b
1	3	1	4	5	.....	.....	1	.....	1	1	81c
.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	81d
1	11	1	12	13	.....	5	2	.....	7	7	82
2	34	1	35	37	.....	15	.....	.....	15	15	83a
1	44	2	46	47	.....	18	1	.....	19	19	83b
14	197	9	206	220	2	29	1	1	31	33	83c
4	92	1	93	97	1	12	.....	.....	12	13	83d
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84a
2	15	7	22	24	.....	19	5	.....	24	24	84b
.....	42	4	46	46	.....	13	.....	.....	13	13	85a
1	6	1	7	8	1	1	.....	.....	1	2	85b
3	167	15	182	185	3	.....	.....	.....	.....	3	85c
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85d
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	85e
1	85	2	87	88	1	22	2	.....	24	25	85f
.....	1	.....	1	1	.....	1	.....	.....	1	1	85g
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	85h
32	460	22	482	514	14	159	7	5	171	185	89–90
4	106	7	113	117	4	58	5	1	64	68	91
.....	89	9	98	98	5	86	22	1	109	114	92a
.....	45	5	50	50	2	15	2	.....	17	19	92b
3	366	30	396	399	3	119	16	.....	135	138	93a
2	101	10	111	113	5	142	11	1	154	159	93b
9	439	34	473	482	4	185	16	3	204	208	93c
8	207	23	230	238	2	54	4	2	60	62	96
.....	12	1	13	13	1	14	2	.....	16	17	97
.....	5	2	7	7	.....	.....	.....	.....	.....	.....	98

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XI. CIRCULATORY SYSTEM DISEASES OF.						
77	Pericarditis						
78	Endocarditis, acute						
79a	Valvular diseases of the heart.	3				3	3
	(1) Aortic insufficiency.	1					
	(2) Aortic stenosis						
	(3) Mitral insufficiency.	2				1	2
	(4) Mitral stenosis					1	
	(5) Combined lesions, mitral aortic.						1
	(6) Pulmonic lesions					1	
	(8) Valvular lesions, unclassified.						
79b	Cardiac hypertrophy						
79c	Cardiac dilatation						
79d	Myocarditis and myocardial insufficiency.						
79e	Heart, other organic diseases of.						
80	Angina pectoris						
81a	Aneurisms						
81b	Arterial sclerosis and hypertension.						
81c	Aortitis						
81d	Arteries, other diseases of						
82	Embolism and thrombosis						
83a	Hemorrhoids						
83b	Varicocele		1		1		
83c	Varicose veins						1
83d	Phlebitis					1	
84a	Status lymphaticus						
84b	Lymphatic system, other diseases of.						
85a	Cardiac arrhythmias						
85b	Cardiac murmurs, not organic.						
85c	Cardiac disorders, functional.						
85d	Bradycardia						
85e	Heart block						
85f	Tachycardia	1					
85g	Hemorrhage						
85h	Circulatory system, other diseases of.						
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89–90	Bronchitis	1					
91	Pneumonia, broncho						
92a	Pneumonia, lobar						
92b	Pneumonia, unclassified						
93a	Pleurisy, suppurative			1	1		
93b	Pleurisy, serofibrinous						
93c	Pleura, other diseases of						
96	Asthma					1	2
97	Pulmonary emphysema						
98	Lungs, other diseases of		1		1		

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
	1	1							77
1		1							78
22	42	64	3		3	8	1	5	79a
3		3						1	(1)
									(2)
15	29	44	3		3	5	1	3	(3)
3	7	10				2		1	(4)
1	4	5				1			(5)
									(6)
	2	2							(8)
2	1	3							79b
	3	3							79c
2	8	10				1			79d
	3	3							79e
	1	1							80
									81a
1	1	2							81b
1		1							81c
									81d
									82
	1	1							83a
	1	1							83b
5	5	10							83c
	2	2	1		1				83d
1		1							84a
	2	2							84b
1	2	3							85a
									85b
	1	1	1		1				85c
									85d
									85e
1	2	3							85f
	1	1							85g
									85h
7	17	24	3		3		1	1	89-90
1	2	3	1	1	2				91
	1	1	2		2				92a
2	6	8							92b
1	15	16	1		1				93a
2	1	3	2		2				93b
2	38	40	3		3	1			93c
3	3	6				2		2	96
	1	1							97
	1	1							98

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				
					White.	Colored.	Color not stated.	Total.	Total native troops.
	XIII. DIGESTIVE SYSTEM, DISEASES OF.								
99a	Pyorrhea alveolaris	31	31	2	28		1	29	
99c	Mouth and annexa, other diseases of.	50	50	2	44		4	48	
101	Esophagus, diseases of	1	1		1			1	
102a	Ulcer of the stomach	71	71	2	66	2	1	69	
102b	Gastro-enteroptosis	26	26	2	24			24	
102c	Stomach, other diseases of	118	117	4	108	3	2	113	1
105a	Duodenal ulcer	81	81	13	67		1	68	
105b	Diarrhea	4	4		4			4	
105c	Enteritis and colitis	46	46	3	42	1		43	
106	Ankylostomiasis (uncinariasis, hookworm).	4	3		3			3	1
107a	Ascaris lumbricoides	18	18			18		18	
107b	Cestodes	1	1		1			1	
108	Appendicitis (all)	137	137	9	119	8	1	128	
109a	Hernia	725	725	23	628	65	9	702	
109b	Intestinal obstruction	9	9		9			9	
110a	Fistula in ano	29	29		24	4	1	29	
110b	Intestines, other diseases of	46	43	2	38	2	1	41	3
113	Cirrhosis of the liver	10	9	1	5	3		8	1
114	Cholelithiasis	1	1	1					
115a	Cholecystitis	27	27	2	24	1		25	
115b	Gall bladder and bile duct, other diseases of.	3	3		3			3	
115c	Liver, other diseases of	2	2		2			2	
117b	Peritoneal adhesions	75	75	3	65	6	1	72	
118a	Pancreatitis	2	2		2			2	
118b	Visceroptosis	10	10		10			10	
118c	Digestive system, other diseases of.	22	22		22			22	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).								
119	Nephritis, acute	62	62	5	54	1	2	57	
120	Nephritis, chronic	615	613	13	554	30	16	600	2
122a	Abscess perinephritic	2	2		2			2	
122b	Nephroptosis	6	6		6			6	
122c	Hydronephrosis	7	7		7			7	
122d	Pyogenic infection of the kidneys.	46	46	2	40	3	1	44	
122e	Kidney and annexa, other diseases of.	13	13	1	8	1	3	12	
123	Nephrolithiasis	34	34	2	29	2	1	32	
124a	Cystitis	26	26	1	22	2	1	25	
124b	Bladder, other diseases of	28	28		26	2		28	
125b	Stricture (nonvenereal)	13	13		13			13	
125c	Urethra, other diseases of	4	4		3	1		4	
126	Prostate, diseases of	18	18	2	15	1		16	
127b	Epididymitis (nonvenereal).	14	14		12	2		14	
127c	Hydrocele	16	16		14	2		16	
127e	Genito-urinary system, other diseases of (nonvenereal).	18	18		10	7	1	18	

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength. 516,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated. Total.		
1	14	.....	14	15	1	13	.....	 13	14	99a
1	42	.....	42	43	1	2	.....	 2	3	99c
.....	1	.....	1	1	.....	.....	.....	....	.....	101
1	58	1	59	60	1	8	1	 9	10	102a
1	18	.....	18	19	1	6	.....	 6	7	102b
1	74	3	77	78	3	32	.....	1 33	36	102c
10	55	.....	55	65	3	12	.....	 12	15	105a
.....	2	.....	2	2	.....	2	.....	 2	2	105b
2	18	1	19	21	1	24	.....	 24	25	105c
.....	3	.....	3	3	.....	.....	.....	....	.....	106
.....	.....	18	18	18	.....	.....	.....	....	.....	107a
.....	1	.....	1	1	.....	.....	.....	....	.....	107b
2	69	7	76	78	7	49	1	 50	57	108
15	481	58	539	554	6	141	7	2 150	156	109a
.....	7	.....	7	7	.....	2	.....	 2	2	109b
.....	20	4	24	24	.....	3	.....	 3	3	110a
2	28	1	29	31	.....	8	1	 9	9	110b
1	2	1	3	4	.....	2	2	 4	4	113
.....	.....	.....	.....	.....	1	.....	.....	....	1	114
1	18	.....	18	19	1	6	1	 7	8	115a
.....	2	.....	2	2	.....	1	.....	 1	1	115b
.....	1	.....	1	1	.....	1	.....	 1	1	115c
3	65	6	71	74	.....	.....	.....	....	.....	117b
.....	1	.....	1	1	.....	1	.....	 1	1	118a
.....	6	.....	6	6	.....	4	.....	 4	4	118b
.....	4	.....	4	4	.....	18	.....	 18	18	118c
2	16	1	17	19	3	37	.....	2 39	42	119
8	246	8	254	262	5	305	22	4 331	336	120
.....	1	.....	1	1	.....	1	.....	 1	1	122a
.....	3	.....	3	3	.....	3	.....	 3	3	122b
.....	7	.....	7	7	.....	.....	.....	....	.....	122c
2	33	2	35	37	.....	6	.....	 6	6	122d
1	7	.....	7	8	.....	1	1	 2	2	122e
1	23	1	24	25	1	4	1	 5	6	123
.....	17	2	19	19	1	5	.....	 5	6	124a
.....	24	2	26	26	.....	2	.....	 2	2	124b
.....	7	.....	7	7	.....	6	.....	 6	6	125b
.....	2	1	3	3	.....	1	.....	 1	1	125c
1	12	1	13	14	1	2	.....	 2	3	126
.....	7	2	9	9	.....	5	.....	 5	5	127b
.....	12	1	13	13	.....	1	1	 2	2	127c
.....	9	7	16	16	.....	1	.....	1 2	2	127e

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99a	Pyorrhea alveolaris						
99c	Mouth and annexa, other diseases of.						
101	Esophagus, diseases of						
102a	Ulcer of the stomach						
102b	Gastro-enteroptosis						
102c	Stomach, other diseases of					2	
105a	Doudenal ulcer						
105b	Diarrhea						
105c	Enteritis and colitis						
106	Ankylostomiasis (uncinariasis, hookworm).						
107a	Ascaris lumbricoides						
107b	Cestodes						
108	Appendicitis (all)						
109a	Hernia	2				2	
109b	Intestinal obstruction						
110a	Fistula in ano						
110b	Intestines, other diseases of		1		1	1	
113	Cirrhosis of the liver						
114	Cholelithiasis						
115a	Cholecystitis						
115b	Gall bladder and bile duct, other diseases of.						
115c	Liver, other diseases of						
117b	Peritoneal adhesions						
118a	Pancreatitis						
118b	Visceroptosis						
118c	Digestive system, other diseases of.						
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).						
119	Nephritis, acute						
120	Nephritis, chronic					1	1
122a	Abscess perinephritic						
122b	Nephroptosis						
122c	Hydronephrosis						
122d	Pyogenic infection of the kidneys.			1	1		
122e	Kidney and annexa, other diseases of.						
123	Nephrolithiasis					2	
124a	Cystitis						
124b	Bladder, other diseases of						
125b	Stricture (nonvenereal)						
125c	Urethra, other diseases of						
126	Prostate, diseases of						
127b	Epididymitis (nonvenereal).						
127c	Hydrocele						
127e	Genito-urinary system, other diseases of (nonvenereal).						

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
1	1	2							99a
	4	4							99c
									101
	1	1							102a
									102b
	1	1					1		102c
	1	1							105a
									105b
									105c
								1	106
									107a
									107b
1	1	2							108
4	7	11							109a
									109b
1	1	2							110a
	1	1				2	1		110b
			1		1			1	113
									114
									115a
									115b
									115c
	1	1							117b
									118a
									118b
									118c
1		1							119
1	12	13					2		120
									122a
									122b
									122c
1	1	2							122d
	3	3							122e
	1	1							123
	1	1							124a
									124b
									125b
									125c
			1		1				126
									127b
1		1							127c
									127e

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.								
142	Gangrene	6	6		5	1		6	
144a	Abscess	24	23	1	17	5		22	1
144b	Cellulitis	18	18	1	17			17	
145b	Nails, defects and diseases of.	4	4		4			4	
145c	Ectoparasites	2	2		2			2	
145e	Dermatitis	4	4	1	3			3	
145f	Eczema	25	25	2	23			23	
145g	Erythema	3	3		3			3	
145m	Psoriasis	29	29	2	26	1		27	
145n	Scabies	3	3		3			3	
145o	Skin and cellular tissue, other diseases of.	204	202	5	176	14	7	197	2
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.								
146a	Osteomyelitis	85	82	1	63	8	10	81	3
146b	Fractures, faulty union of	239	233	2	213	17	1	231	6
146c	Bones, other diseases of	79	78	4	67	4	3	74	1
147a	Ankylosis of joint	215	215	1	181	9	24	214	
147b	Loose bodies in joint	5	5		5			5	
147c	Synovitis	99	99	1	84	11	3	98	
147d	Floating cartilage	25	25		24	1		25	
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).	78	78	1	75		2	77	
149a	Hallux valgus	72	71	1	65	4	1	70	1
149b	Hammertoe	32	32		30	1	1	32	
149c	Metatarsalgia	34	34	1	28	4	1	33	
149d	Myositis	31	31	2	26	3		29	
149e	Pes planus	1,583	1,579	20	1,445	84	30	1,559	4
149f	Talipes	25	25	1	22	1	1	24	
149g	Tenosynovitis	23	23		20	2	1	23	
149h	Organs of locomotion, other diseases of.	715	714	13	633	35	33	701	1
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.								
150	Congenital malformations	33	33	1	28	1	3	32	
189	Not specified or ill-defined diseases.	234	232	7	202	14	9	225	2
	Total for diseases	36,128	35,831	952	30,913	2,957	1,009	34,879	297
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.								
1	Bites	4	4		2	1	1	4	
2	Burns	69	69	4	53	4	8	65	
3	Burns, chemical and X-ray	16	16	1	13	1	1	15	
4	Compression (brain)	1	1		1			1	
5	Concussion (brain)	9	9	1	6	1	1	8	
6	Contusion	132	131	10	106	8	7	121	1

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	516,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
	5		5	5			1		1	1	142
1	10	3	13	14		7	2		9	9	144a
1	8		8	9		8			8	8	144b
	2		2	2		2			2	2	145b
	2		2	2							145c
	3		3	3	1					1	145e
1	12		12	13	1	11			11	12	145f
	1		1	1		2			2	2	145g
1	16	1	17	18	1	10			10	11	145m
	1		1	1		2			2	2	145n
3	146	12	158	161	2	27	2	1	30	32	145o
	48	7	55	55	1	14	1	1	16	17	146a
2	194	16	210	212		14	1		15	15	146b
3	51	3	54	57	1	13	1		14	15	146c
1	154	8	162	163		23	1	3	27	27	147a
	4		4	4		1			1	1	147b
	61	9	70	70	1	22	2		24	25	147c
	21	1	22	22		2			2	2	147d
1	60		60	61		12			12	12	147e
1	54	4	58	59		11			11	11	149a
	28	1	29	29		2			2	2	149b
	23	4	27	27	1	4			4	5	149c
2	17	2	19	21		8	1		9	9	149d
11	1,137	72	1,209	1,220	9	262	12	2	276	285	149e
1	20	1	21	22		2		1	3	3	149f
	12	2	14	14		8			8	8	149g
11	550	29	579	590	2	72	6	7	85	87	149h
	25	1	26	26	1	3		2	5	6	150
6	130	11	141	147	1	69	3	2	74	75	189
645	21,747	2,068	23,815	24,460	286	8,713	876	132	9,721	10,007	
						2	1	1	4	4	Office classification. 1
2	14		14	16	2	39	4	2	45	47	2
1	10	1	11	12		3			3	3	3
						1			1	1	4
	2		2	2	1	3	1		4	5	5
3	26	3	29	32	6	76	5	2	83	89	6

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF—continued.						
142	Gangrene						
144a	Abscess						
144b	Cellulitis						
145b	Nails, defects and diseases of.						
145c	Ectoparasites						
145e	Dermatitis						
145f	Eczema						
145g	Erythema						
145m	Psoriasis						
145n	Scabies						
145o	Skin and cellular tissue, other diseases of.		1		1		
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis						
146b	Fractures, faulty union of.						
146c	Bones, other diseases of					3	
147a	Ankylosis of joint					1	
147b	Loose bodies in joint						
147c	Synovitis						
147d	Floating cartilage						
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).					1	1
149a	Hallux valgus						
149b	Hammertoe						
149c	Metatarsalgia						
149d	Myositis						
149e	Pes planus		5		6	13	4
149f	Talipes						
149g	Tenosynovitis						
149h	Organs of locomotion, other diseases of.					2	2
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.						
150	Congenital malformations						
189	Not specified or ill-defined diseases.						2
	Total for diseases	21	34	11	45	58	39
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
1	Bites						
2	Burns						
3	Burns, chemical and X-ray						
4	Compression (brain)						
5	Concussion (brain)						
6	Contusion	1	1		1	1	

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			International classification No.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
									142
						1			144a
1		1							144b
									145b
									145c
									145e
									145f
									145g
									145m
									145n
2	6	8					2		145o
1	9	10					2	1	146a
5	1	6					5		146b
	3	3					1		146c
3	21	24							147a
									147b
1	3	4							147c
1		1							147d
1	2	3							147e
	1	1				1			149a
	1	1							149b
1	1	2							149c
			1		1				149d
18	28	46	5		5		4		149e
									149f
	1	1							149g
7	26	33					1		149h
	1	1							150
1	7	8						2	189
279	877	1,156	43	2	45	182	76	39	
									Office classification.
									1
	6	6							2
	1	1							3
									4
	1	2							5
1	5	5	2		2	1			6

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification.	Traumatisms.	Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES—continued.								
7	Crushing	231	230	7	187	17	19	223	1
9	Dislocation of joint	151	150	10	131	3	6	140	1
10	Dislocation, articular, cartilage of knee.	127	126	4	111	3	8	122	1
12	Epiphyseal separation	2	2	1	1			1	
13	Eye and annexa, traumatisms.	78	78		52	12	14	78	
14	Foreign bodies	19	19		18		1	19	
15	Fracture, simple	1,991	1,984	71	1,716	51	146	1,913	7
16	Fracture, compound	1,122	1,120	23	831	46	220	1,097	2
17	Fracture, faulty union	4	4		4			4	
18	Gases, deleterious, absorption of.	23	23	2	16	2	3	21	
19	Gunshot wound	1	1		1			1	
20	Hemorrhage and results	5	5		5			5	
24	Secondary result of injury	153	153	4	129	4	16	149	
25	Sprain of joint	400	400	24	332	22	22	376	
26	Strain	65	65	3	56	2	4	62	
28	Synovitis, traumatic, cause undetermined.	133	133	9	113	5	6	124	
30	Wounds, multiple	214	214	9	154	8	43	205	
31	Wounds, penetrating	463	463	5	218	17	223	458	
32	Wounds, extensive	1	1		1			1	
33	Wounds, perforating	66	66	1	51	5	9	65	
34	Wounds, others	564	562	14	445	37	66	548	2
35	Traumatisms, others	313	313	10	267	19	17	303	
	Total for diseases	36,128	35,831	952	30,913	2,957	1,009	34,879	297
	Total for external causes.	6,357	6,342	213	5,020	268	841	6,129	15
	Grand total	42,485	42,173	1,165	35,933	3,225	1,850	41,008	312
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.								
1	Knife	39	39	1	35	3		38	
2	Pistol ball	118	118	4	98	11	5	114	
3	Rifle ball	283	283	1	243	14	25	282	
4	Shotgun	32	32		30	1	1	32	
5	Cutting and piercing instruments (other).	195	194	1	173	16	4	193	1
6	Other military agents	772	771	17	349	19	386	754	1
8	Air machines	117	117	18	96		3	99	
9	Automobiles	297	296	11	270	5	10	285	1
10	Motorcycles	336	336	24	302	1	9	312	
11	Railroad accidents	338	338	6	283	29	20	332	
12	Street car accidents	32	32	3	28	1		29	
13	Other vehicles	289	289	4	259	17	9	285	
14	Animals	135	135	1	131	1	2	134	
16	Crushing	260	260	7	226	20	7	253	
17	Electricity	17	17		15	2		17	
18	Falls	965	959	64	835	35	25	895	6
19	Falling objects	141	141	2	135	3	1	139	
20	Splinters	11	11		10	1		11	
21	Machinery	59	58		55	2	1	58	1

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	Office classification.
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
.....	67	5	72	72	7	116	12	10	138	145	7
4	51	2	53	57	5	73	1	1	75	80	9
.....	49	2	51	51	4	56	1	2	59	63	10
.....	.....	.....	.....	.....	1	1	.....	.....	1	2	12
.....	25	2	27	27	.....	26	10	5	41	41	13
.....	10	.....	10	10	.....	6	.....	.....	6	6	14
17	527	8	535	552	50	1,122	43	43	1,208	1,258	15
7	258	7	265	272	16	542	37	54	633	649	16
.....	3	.....	3	3	.....	1	.....	.....	1	1	17
.....	7	1	8	8	2	9	1	1	11	13	18
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	19
.....	1	.....	1	1	.....	4	.....	.....	4	4	20
2	84	3	87	89	1	34	.....	4	38	39	24
12	131	8	139	151	12	192	13	5	210	222	25
2	18	1	19	21	.....	35	1	.....	36	36	26
1	47	2	49	50	8	62	3	2	67	75	28
5	55	.....	55	60	4	95	8	7	110	114	30
2	57	5	62	64	3	149	12	40	201	204	31
.....	.....	.....	.....	.....	.....	1	.....	.....	1	1	32
.....	12	4	16	16	1	37	1	.....	38	39	33
5	140	9	149	154	7	289	27	8	324	331	34
4	101	3	107	111	6	155	16	7	178	184	35
645	21,747	2,068	23,815	24,460	286	8,713	876	132	9,721	10,007	
67	1,699	66	1,765	1,832	136	3,129	197	194	3,520	3,656	
712	23,446	2,134	25,580	26,292	422	11,842	1,073	326	13,241	13,663	
1	11	2	13	14	.....	23	1	.....	24	24	1
3	19	3	22	25	1	78	8	3	89	90	2
1	64	4	68	69	.....	172	10	8	190	190	3
.....	24	1	25	25	.....	5	.....	.....	5	5	4
1	75	3	78	79	.....	91	12	1	104	104	5
6	100	4	104	110	9	224	15	84	323	332	6
.....	50	.....	50	50	18	43	.....	2	45	63	8
.....	102	5	107	107	11	167	.....	7	174	185	9
9	72	.....	72	81	15	227	1	6	232	247	10
1	84	10	94	95	5	194	19	16	229	234	11
2	19	.....	19	21	1	8	1	.....	9	10	12
.....	45	2	47	47	4	210	14	6	230	234	13
.....	64	.....	64	64	1	63	1	2	66	67	14
.....	79	7	86	86	7	142	13	5	160	167	16
.....	.....	.....	.....	.....	.....	15	2	.....	17	17	17
26	258	7	265	291	33	530	28	18	576	609	18
2	35	3	38	40	.....	93	.....	.....	93	93	19
.....	3	1	4	4	.....	7	.....	.....	7	7	20
.....	23	1	24	24	.....	31	1	.....	32	32	21

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification.	Traumatisms.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES—continued.						
7	Crushing					2	
9	Dislocation of joint	1	2		2	1	
10	Dislocation, articular, cartilage of knee.					2	1
12	Epiphyseal separation						
13	Eye and annexa, traumatisms.						
14	Foreign bodies						
15	Fracture, simple	4	2		2	3	1
16	Fracture, compound		1	2	3	2	
17	Fracture, faulty union						
18	Gases deleterious, absorption of.						
19	Gunshot wound						
20	Hemorrhage and results						
23	Poisoning, other acute						
24	Secondary result of injury	1	1	1	2	1	1
25	Sprain of joint					4	
26	Strain	1					
28	Synovitis, traumatic, cause undetermined.						
30	Wounds, multiple						1
31	Wounds, penetrating						1
32	Wounds, extensive						
33	Wounds, perforating						
34	Wounds, others	2					3
35	Traumatisms, others		1		1	1	1
	Total for diseases	21	34	11	45	58	39
	Total for external causes.	10	8	3	11	17	9
	Grand total	31	42	14	56	75	48
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.[1]						
1	Knife						
2	Pistol ball						
3	Rifle ball						1
4	Shotgun		1		1		
5	Cutting and piercing instruments (other).						3
6	Other military agents	2					2
8	Air machines						
9	Automobiles						
10	Motorcycles					1	
11	Railroad accidents					1	
12	Street car accidents		1		1		
13	Other vehicles			1	1	1	
14	Animals					2	
16	Crushing		2		2	1	
17	Electricity						
18	Falls	5	3		3	4	2
19	Falling objects					1	
20	Splinters						
21	Machinery					1	

[1] The discharges shown above are shown under the diagnosis.

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
1	9	10	1		1		1		7
3	5	8	1		1	1			9
2	6	8	1		1			1	10
									12
1	9	10							13
2	1	3							14
35	103	138	26		26	1	3	3	15
26	166	192	2		2		2		16
									17
	2	2							18
									19
									20
									23
7	12	19	1		1				24
4	17	21	1	1	2				25
3	4	7							26
4	4	8							28
3	36	39							30
9	183	192	2		2				31
									32
2	9	11							33
8	58	66	5	1	6	2			34
5	10	15							35
279	877	1,156	43	2	45	182	76	39	
116	647	763	42	2	44	5	6	4	
395	1,524	1,919	85	4	89	187	82	43	
1		1							1
1	2	3							2
6	17	23							3
	1	1							4
1	3	4	3	1	4	1			5
23	302	325					1		6
3	1	4							8
1	3	4						1	9
4	3	7							10
4	4	8							11
									12
3	3	6							13
1		1	1		1				14
1	2	3	1		1				16
									17
14	7	21	24		24	2	3	1	18
2	1	3	4		4				19
									20
	1	1					1		21

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification.		Total United States Army.							
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	No strength.	936,924	12,569
	Traumatisms.	Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.				Total native troops.
					White.	Colored.	Color not stated.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.								
22	Other industrial agents	139	138	3	110	12	13	135	1
23	Excessive cold	16	16	.....	13	3	.....	16	.....
24	Excessive heat	4	4	.....	4	.....	.....	4	.....
27	Stones	22	22	.....	17	5	.....	22	.....
29	Jumping	47	47	2	42	3	.....	45	.....
30	Hot liquids	35	35	3	30	1	1	32	.....
31	Fire, conflagrations excepted.	3	3	.....	2	1	.....	3	.....
33	Athletic exercises	365	364	9	327	16	12	355	1
34	Drilling and marching	43	42	2	37	2	1	40	1
35	Fighting (brawls)	10	10	.....	8	1	1	10	.....
36	Other external agents	1,237	1,235	30	857	43	305	1,205	2
	Total	6,357	6,342	213	5,020	268	841	6,129	15

The discharges shown above are shown under the diagnosis.

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).						Office classification.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	No strength.	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.				Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Color not stated.	Total.		
.....	24	2	26	26	3	86	10	3	99	102	22
.....	6	1	7	7	.....	6	2	.....	8	8	23
.....	2	.....	2	2	.....	2	.....	.....	2	2	24
.....	5	3	8	8	.....	11	2	.....	13	13	27
1	13	1	14	15	1	27	2	.....	29	30	29
2	8	.....	8	10	1	22	1	1	24	25	30
.....	.....	.....	.....	.....	.....	2	1	.....	3	3	31
2	126	5	131	133	6	196	11	8	215	221	33
2	17	1	18	20	.....	19	.....	.....	19	19	34
.....	2	.....	2	2	.....	5	.....	.....	5	5	35
8	369	.....	369	377	20	432	42	24	498	518	36
67	1,699	66	1,765	1,832	136	3,129	197	194	3,520	3,656	

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

Office classification.			American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	Traumatisms.	Officers, other countries.	Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.						
22	Other industrial agents						
23	Excessive cold						
24	Excessive heat						
27	Stones						1
29	Jumping						
30	Hot liquids						
31	Fire, conflagrations excepted.						
33	Athletic exercises	1	1		1	2	
34	Drilling and marching						
35	Fighting (brawls)			1	1		
36	Other external agents	2		1	1	3	
	Total	10	8	3	11	17	9

TABLE XXI.—*Discharges for disability, United States Army, 1919*—Continued.

ABSOLUTE NUMBERS—Continued.

American troops in other countries (enlisted men).						Native troops (enlisted men).			Office classification.
10,082	No strength.	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.			Transports.			Philippine Scouts.	Hawaiian.	Porto Ricans.	
White.	Color not stated.	Total.	White.	Colored.	Total.				
.....	10	10	.....	.....	.....	.....	1	.....	22
1	.....	1	.....	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	.....	24
.....	.....	.....	.....	.....	.....	.....	.....	.....	27
2	.....	2	.....	.....	.....	.....	.....	.....	29
.....	.....	.....	.....	.....	.....	.....	.....	.....	30
.....	.....	.....	.....	.....	.....	.....	.....	.....	31
2	4	6	.....	.....	.....	.....	.....	1	33
1	1	2	.....	1	1	1	.....	.....	34
1	1	2	.....	.....	.....	.....	.....	.....	35
44	281	325	9	.....	9	1	.....	1	36
116	647	763	42	2	44	5	6	4	

TABLE XXII.—*Discharges for disability, United States Army, 1919.*

RATIOS PER 1,000.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).							
1	Typhoid fever	0.02	0.02		0.02		0.02	
4	Malarial fevers (all)	.00	.00		.00		.00	
6	Measles (all)	.03	.03		.04		.03	
7	Scarlet fever	.01	.01		.01		.01	
9	Diphtheria and results	.04	.04	0.02	.05		.04	
10	Influenza (all)	.60	.60	.29	.63	0.40	.62	0.08
14	Dysentery (all)	.02	.02	.02	.02	.01	.02	
17	Leprosy	.00	.00		.00		.00	
18	Erysipelas	.00	.00	.02	.00		.00	
19c	Carrier, meningococcus	.00	.01		.01		.01	
19g	Meningitis, cerebrospinal (epidemic).	.14	.14	.04	.16	.06	.15	
19h	Mumps	.01	.01		.01	.02	.01	
19k	Poliomyelitis, anterior, acute	.01	.01		.01		.01	
19l	Trench fever	.01	.01		.01		.01	
19m	Trench mouth	.00	.00		.00		.00	
19p	Epidemic diseases (others)	.01	.01		.01		.01	
25a	Trench foot	.04	.04	.04	.03	.10	.04	
25b	Mycosis (others)	.00	.00		.00		.00	
26	Pellagra	.00	.00		.00		.00	
27	Beriberi	.01						.56
47	Acute articular rheumatism	.05	.05	.02	.05	.04	.05	
	II. TUBERCULOSIS.							
28a	Tuberculosis of lungs	6.41	6.29	2.48	6.38	6.06	6.52	15.36
28b	Suspected tuberculosis	.06	.06	.07	.05	.07	.06	
29	Acute miliary tuberculosis	.00	.00	.02	.00		.00	
30–35	Tuberculosis (others)	.20	.20	.05	.18	.32	.21	.24
	Tuberculosis (all)	6.67	6.56	2.63	6.62	6.45	6.79	15.60
	III. VENEREAL DISEASES (ALL).							
	Syphilis (all)	.47	.47	.20	.37	1.37	.49	.24
37a	Syphilis, hereditary	.01	.01		.01		.01	
37c	Syphilis, secondary	.05	.05	.04	.04	.16	.05	
37d	Syphilis, tertiary	.37	.38	.13	.30	1.10	.39	.16
37e	Syphilis, unclassified	.04	.04	.04	.03	.11	.04	.08
38a	Chancroidal infection	.02	.03		.01	.20	.03	
38b	Gonococcus infection	.54	.54	.11	.23	3.62	.57	.08
	Venereal (all)	1.03	1.04	.31	.61	5.19	1.08	.32
	IV. GENERAL DISEASES (OTHER).							
36	Rickets	.05	.05		.05	.01	.05	
39–45	Cancer and other malignant tumors	.03	.03	.05	.02	.03	.03	
46	Tumors, benign	.05	.05	.02	.05	.02	.05	
48a	Arthritis	1.27	1.28	1.04	1.28	1.07	1.29	.32
50	Diabetes, mellitus	.13	.13	.13	.13	.11	.13	
51a	Exophthalmic goiter (hyperthyroidism).	.52	.52	.16	.58	.07	.54	
53a	Leukemia	.00	.00		.00		.00	
53b	Hodgkin's disease	.01	.01		.01	.01	.01	
88	Goiter, simple	.08	.08	.05	.09	.01	.08	
116	Spleen, diseases of	.00	.00	.02	.00		.00	
53c	Other diseases of the ductless glands	.01	.01		.01		.01	
54	Anemia, chlorosis	.01	.01		.01		.01	
55a	Hemophilia	.00	.00		.00		.00	
55c	Purpura	.00	.00		.00		.00	
55d	Muscular rheumatism	.03	.03	.02	.03	.07	.03	

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Offi	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
.....	0.02	.....	0.02	0.01	.....	0.02	.....	0.02	0.02	1
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	4
.....	.10	.....	.09	.09	.....	.00	.....	.00	.00	5
.....	.04	.....	.04	.03	.....	.00	.....	.00	.00	7
.....	.05	.....	.04	.04	0.04	.05	.....	.04	.04	9
0.23	1.19	0.63	1.14	1.07	.40	.39	0.34	.39	.39	10
.04	.05	.....	.04	.04	.....	.02	.02	.02	.02	14
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	17
.04	.01	.....	.01	.01	.....	.....	.....	.....	.....	18
.....	.02	.....	.02	.01	.....	.....	.....	.....	.....	19c
.....	.21	.11	.21	.19	.08	.14	.05	.14	.14	19g
.....	.02	.07	.03	.02	.....	.01	.....	.01	.01	19h
.....	.02	.....	.02	.01	.....	.01	.....	.01	.01	19k
.....	.01	.....	.01	.01	.....	.01	.....	.01	.01	19l
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	19m
.....	.02	.....	.02	.01	.....	.01	.....	.01	.01	19p
.....	.04	.07	.05	.04	.....	.03	.12	.05	.05	25a
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	25b
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	26
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
.04	.11	.11	.11	.11	.....	.03	.02	.03	.02	47
4.43	14.78	14.57	14.76	13.93	.81	2.47	2.88	2.53	2.45	28a
.11	.08	.04	.07	.07	.04	.05	.10	.05	.05	28b
.....	.01	.....	.01	.01	.04	.00	.....	.00	.00	29
.08	.37	.67	.39	.37	.04	.10	.19	.11	.11	30–35
4.61	15.23	15.28	15.23	14.38	.93	2.62	3.17	2.69	2.62	
.23	.84	3.48	1.08	1.01	.16	.15	.58	.20	.20	37
.....	.01	.....	.01	.01	.....	.00	.....	.01	.01	37a
.04	.10	.48	.13	.13	.....	.01	.03	.01	.01	37c
.15	.66	2.66	.84	.78	.12	.13	.53	.18	.17	37d
.04	.07	.34	.10	.09	.04	.01	.02	.01	.01	37e
.....	.02	.70	.08	.07	.....	.00	.....	.00	.00	38a
.15	.55	11.73	1.53	1.42	.08	.08	.36	11	.11	38b
.38	1.41	15.90	2.68	2.50	.24	.23	.94	.32	.31	.....
.....	.11	.04	.10	.09	.....	.02	.....	.02	.02	36
.08	.06	.04	.06	.06	.04	.01	.03	.01	.01	39–45
.04	.11	.07	.10	.10	.....	.03	.....	.02	.02	46
1.50	2.70	2.85	2.71	2.61	.73	.66	.39	.64	.64	48a
.23	.25	.15	.24	.24	.04	.08	.10	.08	.08	50
.26	1.33	.22	1.23	1.16	.08	.21	.02	.20	.19	51a
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	53a
.....	.03	.....	.02	.02	.....	.01	.02	.01	.01	53b
.....	.18	.04	.17	.16	.12	.05	.....	.04	.05	88
.04	.01	.....	.01	.01	.....	.....	.....	.....	.....	116
.....	.04	.....	.04	.04	.....	.00	.....	.00	.00	53c
.....	.03	.....	.02	.02	.....	.01	.....	.01	.01	54
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	55a
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	55c
.04	.06	.26	.08	.07	.....	.01	.....	.01	.01	55d

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,061
	I. INFECTIOUS DISEASES (EXCLUDING TUBERCULOSIS AND VENEREAL).						
1	Typhoid fever						
4	Malarial fevers (all)						
6	Measles (all)						
7	Scarlet fever						
9	Diphtheria and results						
10	Influenza (all)						0.20
14	Dysentery (all)						
17	Leprosy						
18	Erysipelas						
19c	Carrier, meningococcus						
19g	Meningitis, cerebrospinal (epidemic).						
19h	Mumps						
19k	Poliomyelitis, anterior, acute						.20
19l	Trench fever						
19m	Trench mouth						
19p	Epidemic diseases, others						
25a	Trench foot	0.49					
25b	Mycosis (others)						
26	Pellagra						
27	Beriberi						
47	Acute articular rheumatism						
	II. TUBERCULOSIS.						
28a	Tuberculosis of lungs		4.64	1.30	3.69	2.23	
28b	Suspected tuberculosis						
29	Acute miliary tuberculosis						
30–35	Tuberculosis, others		.26	.65	.37	.32	.20
	Tuberculosis (all)		4.89	1.95	4.06	2.55	.20
	III. VENEREAL DISEASES (ALL).						
37	Syphilis (all)	.25					.20
37a	Syphilis, hereditary						
37c	Syphilis, secondary	.25					
37d	Syphilis, tertiary						.20
37e	Syphilis, unclassified						
38a	Chancroidal infection						
38b	Gonococcus infection					.32	
	Venereal (all)	.25				.32	.20
	IV. GENERAL DISEASES (OTHER).						
36	Rickets						
39–45	Cancer and other malignant tumors.						
46	Tumors, benign						
48a	Arthritis						
50	Diabetes, mellitus						
51a	Exophthalmic goiter (hyperthyroidism).						.20
53a	Leukemia						
53b	Hodgkin's disease						
88	Goiter, simple						
116	Spleen, diseases of						
53c	Other diseases of the ductless glands.						
54	Anemia, chlorosis						
55a	Hemophilia						
55c	Purpura						
55d	Muscular rheumatism						

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
.....	.....	.....	.....	.....	.....	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	4
.....	.....	.....	.....	.....	.....	.....	.....	6
.....	.....	.....	.....	.....	.....	.....	.....	7
.....	.....	0.06	.....	0.05	.....	.....	.....	9
0.20	1.19	.08	.....	.07	.....	0.48	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	14
.....	.....	.....	.....	.....	.....	.....	.....	17
.....	.....	.....	.....	.....	.....	.....	.....	18
.....	.....	.....	.....	.....	.....	.....	.....	19c
.10	.20	.....	.....	.....	.....	.....	.....	19g
.....	.....	.02	.....	.02	.....	.....	.....	19h
.....	.....	.....	.....	.....	.....	.....	.....	19k
.....	.....	.....	.....	.....	.....	.....	.....	19l
.....	.....	.....	.....	.....	.....	.....	.....	19m
.....	.....	.....	.....	.....	.....	.....	.....	19p
.....	.10	.....	.....	.....	.....	.....	.....	25a
.....	.....	.....	.....	.....	.....	.....	.....	25b
.....	.....	.....	.....	.....	.....	.....	.....	26
.....	.....	.....	.....	.....	.....	.....	3.35	27
.10	.10	.....	.....	.....	.....	.....	.....	47
1.29	16.56	.02	0.16	.03	17.76	14.38	6.69	28a
.10	.20	.....	.....	.....	.....	.....	.....	28b
.....	.....	.....	.....	.....	.....	.....	.....	29
.10	.99	.....	.....	.....	.....	.96	.48	30–35
1.49	17.75	.02	.16	.03	17.76	15.34	7.17	
.10	1.49	.....	.....	.....	.12	.48	.48	37
.....	.....	.....	.....	.....	.....	.....	.....	37a
.....	.....	.....	.....	.....	.....	.....	.....	37c
.10	1.09	.....	.....	.....	.....	.48	.48	37d
.....	.40	.....	.....	.....	.12	.....	.....	37e
.....	.....	.....	.....	.....	.....	.....	.....	38a
.....	.....	.....	.....	.....	.12	.....	.....	38b
.10	1.49	.....	.....	.....	.24	.48	.48	
.30	.40	.....	.....	.....	.....	.....	.....	30
.....	.10	.....	.....	.....	.....	.....	.....	39–45
.10	.40	.....	.....	.....	.....	.....	.....	46
.50	3.07	.....	.....	.....	.12	1.44	.....	48a
.10	.40	.....	.....	.....	.....	.....	.....	50
.89	2.18	.....	.....	.....	.....	.....	.....	51a
.....	.....	.....	.....	.....	.....	.....	.....	53a
.10	.10	.....	.....	.....	.....	.....	.....	53b
.10	.20	.....	.....	.....	.....	.....	.....	88
.....	.....	.....	.....	.....	.....	.....	.....	116
.....	.....	.....	.....	.....	.....	.....	.....	53c
.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	55a
.....	.....	.....	.....	.....	.....	.....	.....	55c
.10	.20	.....	.....	.....	.....	.....	.....	55d

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	IV. GENERAL DISEASES (OTHER)—continued.							
55e	General diseases, others	0.03	0.03	0.02	0.01	0.02	0.03	.....
56a	Alcoholism (acute or chronic)	.08	.08	.02	.09	.01	.09	.....
56b	Drug addiction	.12	.12	.04	.12	.17	.13	0.08
57–59	Poisoning, chronic	.00	.00	.....	.00	.....	.00	.....
	V. NERVOUS SYSTEM, DISEASES OF (ALL).							
60	Encephalitis	.01	.01	.04	.01	.....	.01	.....
61	Meningitis, simple	.01	.01	.....	.01	.01	.01	.....
62	Locomotor ataxia	.02	.02	.02	.02	.01	.02	.....
63a	Multiple sclerosis	.02	.02	.....	.02	.....	.02	.....
63b	Spinal cord, diseases of (others)	.06	.06	.05	.01	.01	.06	.....
64	Apoplexy	.03	.03	.....	.03	.04	.03	.....
66a	Facial paralysis	.04	.04	.04	.04	.04	.04	.....
66b	Paraplegia	.01	.01	.....	.00	.01	.01	.....
66c	Paralysis without specified cause (others).	.10	.10	.04	.09	.01	.10	.08
69	Epilepsy	.76	.77	.04	.77	.93	.81	.08
74a	Jacksonian epilepsy	.01	.01	.....	.01	.03	.01	.....
74b	Neurasthenia	.75	.76	.59	.82	.13	.77	.....
74c	Enuresis	.05	.06	.....	.05	.07	.06	.....
74d	Neuro is	.02	.02	.02	.02	.....	.02	.....
74e	Neuro-circulatory asthenia (disordered action of the heart).	.26	.27	.05	.29	.12	.28	.....
74f	Shell shock (cause not given)	.05	.05	.05	.05	.....	.05	.....
72	Chorea	.01	.01	.....	.01	.....	.01	.....
73a	Hysteria and results (psychoses excepted).	.50	.51	.20	.52	.34	.53	.....
73b	Neuralgia	.02	.02	.....	.01	.05	.02	.....
73c	Neuritis	.16	.16	.27	.16	.05	.15	.....
73d	Speech, defective	.01	.01	.02	.01	.....	.01	.....
74g	Nervous system, other diseases of	.07	.07	.14	.07	.....	.06	.....
	VI. MENTAL ALIENATION.							
67	General paralysis of the insane	.08	.08	.02	.08	.09	.08	.....
68a	Constitutional psychopathic states	.89	.81	.05	.90	.21	.85	.....
68b	Mental de ficiency	1.34	1.35	.....	1.36	1.65	1.42	.64
68d	Dementia precox	1.87	1.89	.23	1.96	1.56	1.98	.96
68e	Psychasthenia	.08	.08	.07	.08	.....	.08	.....
68f	Psychoneuroses	.28	.28	.16	.29	.14	.29	.....
68g	Psychosis, alcoholic	.06	.06	.....	.07	.01	.07	.....
68h	Psychosis, manic depressive	.75	.75	.27	.80	.46	.78	.....
68i	Psychosis (others)	.44	.45	.13	.47	.32	.47	.....
	VII. EYES AND THEIR ANNEXA, DISEASES OF.							
75a	Refractive errors (all)	.26	.26	.13	.27	.14	.27	.16
	(1) Astigmatism	.05	.05	.05	.05	.03	.05	.08
	(2) Hyperopia	.01	.01	.....	.02	.....	.01	.....
	(3) Myopia	.05	.05	.04	.06	.03	.06	.....
	(4) Defective vision (cause not stated).	.14	.14	.04	.15	.07	.15	.08
75b	Strabismus	.02	.02	.....	.02	.....	.02	.08
75c	Leucoma	.03	.03	.02	.03	.03	.03	.....
75d	Cataract	.06	.06	.....	.06	.04	.06	.....
75e	Trachoma	.16	.17	.....	.19	.03	.18	.08
75f	Conjunctivitis (others)	.03	.04	.05	.04	.02	.03	.....
75g	Pterygium	.01	.01	.....	.01	.....	.01	.....
75h	Amblyopia	.06	.06	.....	.07	.05	.07	.....

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
.....	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	055e
.....	.13	.04	.12	.11	.04	.07	.....	.06	.06	56a
0.08	.30	.52	.32	.30	.....	.03	.03	.03	.03	56b
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	57–59
.04	.01	.....	01	.01	.04	.01	.....	.01	.01	60
.....	.03	.04	.03	.03	.....	.00	.....	.00	.00	61
.04	.04	.04	.04	.04	.....	.02	.....	.01	.01	62
.....	.03	.....	.03	.02	.....	.02	.....	.01	.01	63a
.11	.12	.04	.11	.11	.....	.03	.....	.03	.02	63b
.....	.05	.15	.06	.05	.....	.02	.....	.02	.02	64
.08	.06	.11	.07	.07	.....	.02	.02	.02	.02	66a
.....	.01	.....	.01	.01	.....	.00	.02	.00	.00	66b
.....	.18	.04	.17	.15	.04	.04	.....	.04	.04	66c
.08	1.44	1.52	1.45	1.34	.....	.50	.78	.53	.51	69
.....	.01	.11	.02	.02	.....	.01	.....	.01	.01	74a
.94	1.84	.33	1.70	1.64	.24	.34	.05	.32	.31	74b
.....	.13	.26	.14	.13	.....	.02	.....	.01	.01	74c
.....	.05	.....	.05	.04	.04	.00	.....	.00	.00	74d
.04	.63	.30	.60	.55	.04	.14	.05	.13	.13	74e
.08	.10	.....	.09	.09	.04	.03	.....	.03	.03	74f
.....	.03	.....	.03	.03	.....	.01	.....	.01	.01	72
.26	1.03	.81	1.01	.95	.16	.31	.17	.30	.29	73a
.....	.01	.19	.02	.02	.....	.01	.....	.01	.01	73b
.38	.31	.07	.29	.29	.16	.09	.05	.09	.09	73c
.....	.03	.....	.03	.02	.04	.....	.....	.....	.00	73d
.23	.15	.....	.14	.15	.08	.03	.....	.03	.03	74g
.04	.14	.26	.15	.14	.....	.05	.02	.05	.05	67
.11	1.69	.41	1.57	1.46	.....	.55	.12	.51	.48	68a
.....	2.54	2.92	2.57	2.36	.....	.84	1.26	.89	.85	68b
.34	3.55	2.92	3.49	3.21	.16	1.32	1.11	1.31	1.26	68d
.08	.15	.....	.14	.13	.08	.06	.....	.05	.05	68e
.15	.55	.22	.52	.49	.16	.19	.12	.18	.18	68f
.....	.12	.....	.11	.10	.....	.05	.02	.05	.05	68g
.30	1.48	.70	1.41	1.32	.24	.51	.41	.51	.50	68h
.23	.82	.59	.80	.76	.04	.33	.24	.32	.31	68i
.15	.61	.37	.59	.55	.12	.11	.05	.11	.11	75a
.04	.10	.07	.09	.09	.08	.03	.02	.03	.03	(1)
.....	.03	.....	.03	.03	.....	.01	.....	.01	.01	(2)
.04	.14	.07	.13	.12	.04	.02	.02	.02	.02	(3)
.08	.34	.22	.33	.31	.....	.05	.02	.05	.05	(4)
.....	.05	.....	.04	.04	.....	.00	.....	.00	.00	75b
.04	.07	.07	.07	.07	.....	.01	.02	.01	.01	75c
.....	.14	.11	.13	.12	.....	.03	.02	.03	.03	75d
.....	.34	.01	.31	.29	.....	.12	.03	.12	.11	75e
.08	.09	.....	.08	.08	.04	.01	.03	.01	.01	75f
.....	.02	.....	.02	.01	.....	.01	.....	.01	.01	75g
.....	.18	.19	.18	.16	.....	.02	.....	.01	.01	75h

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	IV. GENERAL DISEASES (OTHER)—continued.						
55e	General diseases, others						
56a	Alcoholism (acute or chronic)					0.32	
56b	Drug addiction						
57–59	Poisoning, chronic						
	V. NERVOUS SYSTEM, DISEASES OF (ALL).						
60	Encephalitis						
61	Meningitis, simple						
62	Locomotor ataxia						
63a	Multiple sclerosis						
63b	Spinal cord, diseases of (others)						0.20
64	Apoplexy						
66a	Facial paralysis						
66b	Paraplegia						
66c	Paralysis without specified cause (others).	0.25					
69	Epilepsy					.64	
74a	Jacksonian epilepsy						
74b	Neurasthenia	.49					
74c	Enuresis						
74d	Neurosis						
74e	Neuro-circulatory asthenia (disordered action of the heart).	.25					
74f	Shell shock (cause not given)						
72	Chorea						
73a	Hysteria and results (psychoses excepted).					.32	
73b	Neuralgia						
73c	Neuritis	.25					
73d	Speech, defective						
74g	Nervous system, other diseases of						
	VI. MENTAL ALIENATION.						
67	General paralysis of the insane						
68a	Constitutional psychopathic states			1.30	0.37	.96	.60
68b	Mental deficiency		0.52	.65	.55	1.27	
68c	Malingering						
68d	Dementia præcox			1.30	.37	.32	1.60
68e	Psychasthenia						
68f	Psychoneurosis	.25					
68g	Psychosis, alcoholic						.40
68h	Psychosis, manic depressive	.25	.26		.18	.32	
68i	Psychosis (others)						.20
	VII. EYES AND THEIR ANNEXA, DISEASES OF.						
75a	Refractive errors (all)						
	(1) Astigmatism						
	(2) Hyperopia						
	(3) Myopia						
	(4) Defective vision (cause not stated).						
75b	Strabismus						
75c	Leucoma						
75d	Cataract						
75e	Trachoma						
75f	Conjunctivitis (others)						
75g	Pterygium						
75h	Amblyopia						

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
0.10	0.10							55e
.60	.79							56a
.10	.79					0.48		56b
								57–59
								60
								61
								62
.10	.10							63a
	.40							63b
	.10							64
.10	.30							66a
	.10							66b
.10	2.18				0.12			66c
.60	2.08				.12			69
								74a
.89	2.68							74b
	.40							74c
	.20							74d
.10	.69	0.02		0.02				74e
	.10							74f
								72
.10	1.98							73a
	.10							73b
.10	.50							73c
.10	.10							73d
	.20							74g
	.40							67
.69	2.88	.02		.02				68a
1.79	5.36	.02		.02	.24	2.90		68b
								68c
.60	5.46	.04		.03	.95	1.44	0.48	68d
	.30							68e
.20	1.29							68f
								68g
.69	2.28							68h
.20	1.29							68i
.50	1.19				.12		.48	75a
	.20				.12			(1)
.10	.10							(2)
								(3)
.40	.89						.48	(4)
.20	.30					.48		75b
								75c
								75d
.10	.40					.48		75e
								75f
								75g
.10	.10							75h

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	VII. EYES AND THEIR ANNEXA, DISEASES OF—continued.							
75j	Choroiditis	0.06	0.07	0.04	0.07	0.07	0.07	
75k	Iritis	.05	.05	.04	.05	.06	.05	
75l	Keratitis	.09	.09	.07	.09	.11	.09	0.08
75m	Retinitis	.05	.06	.02	.06	.01	.06	
75n	Nystagmus	.01	.01		.01	.01	.01	
75o	Glaucoma	.01	.01	.04	.01	.01	.01	
75p	Eyelids, diseases of	.01	.01		.01	.01	.01	
75r	Eyes and annexa, other diseases of	.23	.23	.07	.23	.20	.24	.16
	VIII. EAR, DISEASES OF.							
76a	Otitis media	1.30	1.32	1.39	1.39	.29	1.31	.16
76b	Mastoiditis	.05	.05	.02	.05	.03	.05	
76c	Otitis externa	.00	.00		.00		.00	
76d	Defective hearing (cause not stated)	.15	.16	.43	.15	.04	.14	
76e	Ear, other diseases of	.03	.03	.02	.03	.01	.03	.08
	IX. NASAL FOSSÆ, DISEASES OF.							
86b	Deviation of nasal septum and spurs.	.01	.02		.02		.02	
86d	Turbinate hypertrophy	.05	.05	.02	.05	.03	.05	.08
86e	Sinusitis (all)	.11	.11	.29	.10	.04	.10	
86f	Polypus nasal	.00	.00	.02	.00		.00	
86h	Rhinitis (cause not stated)	.02	.02	.02	.02		.02	
86i	Nasal fossæ, other diseases of	.01	.01		.01		.01	
	X. THROAT, DISEASES OF.							
87a	Laryngitis, acute catarrhal	.04	.04	.02	.04	.01	.04	
87b	Larynx, other diseases of	.00	.00		.00		.00	
100a	Tonsillitis, acute	.04	.04		.05		.04	
100b	Tonsillitis, chronic	.03	.03	.07	.03	.02	.03	
100c	Tonsils, focal infection from	.00	.00		.00		.00	
100d	Pharyngitis, acute catarrhal	.01	.01	.02	.01		.01	
100e	Pharynx, other diseases of	.00	.00	.04	.00		.00	
	XI. CIRCULATORY SYSTEM, DISEASES OF.							
77	Pericarditis	.01	.01		.01	.02	.01	
78	Endocarditis, acute	.00	.01		.00	.02	.01	
79a	Valvular diseases of the heart	2.16	2.18	1.12	2.17	2.29	2.24	1.12
	(1) Aortic insufficiency	.30	.30	.27	.29	.32	.30	.08
	(2) Aortic stenosis	.03	.03	.02	.03	.02	.03	
	(3) Mitral insufficiency	1.37	1.38	.61	1.36	1.60	1.42	.72
	(4) Mitral stenosis	.32	.33	.18	.34	.25	.33	.24
	(5) Combined lesions, mitral aortic.	.12	.12	.04	.13	.06	.13	.08
	(6) Pulmonic lesions	.00	.00		.00		.00	
	(8) Valvular lesions, unclassified.	.02	.03		.02	.03	.03	
79b	Cardiac hypertrophy	.07	.07	.02	.07	.11	.07	
79c	Cardiac dilatation	.01	.02	.02	.01		.01	
79d	Myocarditis and myocardial insufficiency.	.28	.29	.27	.28	.20	.29	.08
79e	Heart, other organic diseases of	.09	.09		.09	.15	.10	
80	Angina pectoris	.00	.00		.00		.00	
81a	Aneurisms	.02	.02	.02	.02	.04	.02	
81b	Arterial sclerosis and hypertension	.03	.03	.04	.03	.04	.03	
81c	Aortitis	.01	.01	.02	.00	.02	.01	

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.04	0.14	0.22	0.14	0.13	0.04	0.03	0.02	0.03	0.03	75j
.04	.09	.19	.10	.09	.04	.02	.02	.03	.03	75k
.08	.14	.11	.14	.13	.08	.07	.12	.07	.07	175l
.04	.12	.04	.11	.11	.....	.03	.....	.03	.03	75m
.....	.02	.04	.02	.02	.....	.00	.....	.00	.00	75n
.04	.03	.....	.03	.03	.04	.00	.02	.00	.01	75o
.....	.03	.04	.03	.02	.....	.01	.....	.01	.01	75p
.04	.55	.48	.55	.51	.12	.09	.10	.90	.91	75r
2.14	2.83	.70	2.65	2.60	.68	.71	.14	.65	.65	76a
.04	.11	.04	.10	.10	.....	.03	.03	.03	.03	76b
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	76c
.86	.35	.11	.33	.37	.04	.05	.02	.05	.05	76d
.04	.06	.....	.06	.05	.....	.02	.....	.01	.01	76e
.....	.04	.....	.03	.03	.....	.01	.....	.01	.01	86b
.04	.10	.11	.10	.10	.....	.02	.....	.02	.02	86d
.19	.19	.07	.18	.18	.40	.07	.03	.07	.08	86e
.04	.00	.....	.00	.01	.....	.....	.....	.....	.....	86f
.04	.04	.....	.04	.04	.....	.01	.....	.01	.01	86h
.....	.02	.....	.02	.01	.....	.00	.....	.00	.00	86i
.04	.09	.04	.08	.08	.....	.01	.....	.01	.01	87a
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	87b
.....	.06	.....	.06	.05	.....	.02	.....	.02	.02	100a
.11	.06	.04	.06	.06	.04	.02	.02	.02	.02	100b
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	100c
.04	.04	.....	.04	.04	.....	.00	.....	.00	.00	100d
.04	.00	.....	.00	.01	.04	.....	.....	.....	.00	100e
.....	.02	.07	.02	.02	.....	.01	.....	.01	.01	77a
.....	.00	.07	.01	.01	.....	.00	.....	.01	.00	78a
1.39	4.62	4.70	4.63	4.37	.89	1.03	1.48	1.11	1.10	79a
.38	.67	.89	.69	.66	.16	.11	.10	.12	.12	(1)
.04	.06	.07	.07	.06	.....	.01	.....	.01	.01	(2)
.68	2.70	2.66	2.70	2.54	.56	.75	1.33	.83	.82	(3)
.23	.79	.81	.79	.75	.16	.12	.02	.11	.11	(4)
.08	.32	.15	.30	.28	.....	.04	.03	.04	.04	(5)
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	(6)
.....	.07	.11	.07	.07	.....	.....	.....	.....	.....	(8)
.04	.18	.33	.19	.18	.....	.01	.02	.01	.01	79b
.04	.03	.....	.02	.02	.....	.01	.....	.01	.01	79c
.38	.58	.63	.58	.57	.20	.15	.12	.15	.15	79d
.....	.20	.37	.21	.19	.....	.04	.07	.05	.04	79e
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	80
.....	.03	.15	.04	.04	.04	.01	.....	.01	.01	81a
.04	.07	.11	.07	.07	.04	.01	.02	.01	.01	81b
.04	.01	.04	.01	.01	.....	.....	.02	.00	.00	81c

TABLE XXII.—*Discharges or disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	VII. EYES AND THEIR ANNEXA, DISEASES OF—continued.						
75i	Amaurosis						
75j	Choroiditis						
75k	Iritis						
75l	Keratitis						
75m	Retinitis						
75n	Nystagmus						
75o	Glaucoma		0.26		0.18		
75p	Eyelids, diseases of						
75r	Eyes and annexa, other diseases of						
	VIII. EAR, DISEASES OF.						
76a	Otitis media	0.74	.26		.18		0.40
76b	Mastoiditis						
76c	Otitis, external						
76d	Defective hearing (cause not stated).						
76e	Ear, other diseases of			0.65	.18	0.32	
	IX. NASAL FOSSÆ, DISEASES OF.						
86b	Deviation of nasal septum and spurs.						
86c	Nose, external deformity of						
86d	Turbinate hypertrophy						.20
86e	Sinusitis (all)	.25				.32	
86f	Polypus, nasal						
86h	Rhinitis (cause not stated)						
86i	Nasal fossæ, other diseases of						
	X. THROAT, DISEASES OF.						
87a	Laryngitis, acute catarrhal					.32	
87b	Larynx, other diseases of						
100a	Tonsillitis, acute						
100b	Tonsillitis, chronic						
100c	Tonsils, local infection from						
100d	Pharyngitis, acute catarrhal						
100e	Pharynx, other diseases of						
	XI. CIRCULATORY SYSTEM, DISEASES OF.						
77	Pericarditis						
78	Endocarditis, acute						
79a	Valvular diseases of the heart	.74				.96	.60
	(1) Aortic insufficiency	.25					
	(2) Aortic stenosis						
	(3) Mitral insufficiency	.49				.32	.40
	(4) Mitral stenosis					.32	
	(5) Combined lesions, mitral, aortic.						.20
	(6) Pulmonic lesions					.32	
	(8) Valvular lesions, unclassified.						
79b	Cardiac hypertrophy						
79c	Cardiac dilatation						
79d	Myocarditis and myocardial insufficiency.						
79e	Heart, other organic diseases of						
80	Angina pectoris						
81a	Aneurisms						
81b	Arterial sclerosis and hypertension						
81c	Aortitis						

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
								75i
	0.10							75j
	.40	0.06		0.05				75k
0.20	.40					0.48		75l
.10	.30							75m
								75n
								75o
								75p
	.60					.96		75r
2.48	5.65	.02		.02		.96		76a
	.10							76b
								76c
.30	.40							76d
					0.12			76e
								86b
								86c
	.10						0.48	86d
.10	.30							86e
								86f
.10	.10							86h
								86i
.10	.30							87a
								87b
1.39	1.39							100a
								100b
	.10							100c
								100d
								100e
	.10							77
.10	.10							78
2.18	6.35	.06		.05	.95	.48	2.39	79a
.30	.30						.48	(1)
								(2)
1.49	4.36				.60	.48	1.43	(3)
.30	.99	.06		.05	.24		.48	(4)
.10	.50				.12			(5)
								(6)
	.20							(8)
.20	.30							79b
	.30							79c
.20	.99				.12			79d
	.30							79e
	.10							80
								81a
.10	.20							81b
.10	.10							81c

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XI. CIRCULATORY SYSTEM, DISEASES OF—continued.							
81d	Arteries, other diseases of	0.00	0.00			0.01	0.00	
82	Embolism and thrombosis	.02	.02	0.02	0.02	.03	.02	
83a	Hemorrhoids	.05	.05	.04	.06	.01	.05	
83b	Varicocele	.07	.07	.02	.07	.03	.07	
83c	Varicose veins	.26	.27	.29	.28	.11	.26	
83d	Phlebitis	.11	.11	.09	.13	.01	.12	
84a	Status lymphaticus	.00	.00		.00		.00	
84b	Lymphatic system, other diseases of.	.05	.05	.04	.04	.13	.05	
85a	Cardiac arrhythmias	.06	.06		.07	.04	.07	
85b	Cardiac murmurs, not organic	.01	.01	.04	.01	.01	.01	
85c	Cardiac disorders, functional	.19	.19	.11	.20	.16	.20	
85e	Heart block	.00	.00		.00		.00	
85f	Tachycardia	.12	.12	.05	.13	.04	.12	
85g	Hemorrhage	.00	.00		.00			
85h	Circulatory system, other diseases of.	.00	.00		.00			
	XII. RESPIRATORY SYSTEM, DISEASES OF.							
89–90	Bronchitis	.73	.73	.85	.75	.31	.73	0.16
91	Pneumonia, broncho	.19	.19	.14	.20	.14	.19	
92a	Pneumonia, lobar	.21	.21	.09	.21	.33	.22	
92b	Pneumonia, unclassified	.08	.08	.04	.07	.07	.08	
93a	Pleurisy, suppurative	.55	.56	.11	.58	.50	.59	
93b	Pleurisy, serofibrinous	.28	.28	.13	.29	.22	.29	
93c	Pleura, other diseases of	.73	.74	.23	.75	.53	.77	.08
96	Asthma	.31	.31	.18	.32	.29	.32	.32
97	Pulmonary emphysema	.03	.03	.02	.03	.03	.03	
98	Lungs, other diseases of	.01	.01		.01	.02	.01	
	XIII. DIGESTIVE SYSTEM, DISEASES OF.							
99a	Pyorrhea alveolaris	.03	.03	.04	.03		.03	
99c	Mouth and annexa, other diseases of.	.05	.05	.04	.05		.05	
101	Esophagus, diseases of	.00	.00		.00		.00	
102a	Ulcer of the stomach	.07	.07	.04	.08	.02	.07	
102b	Gastroenteroptosis	.03	.03	.04	.03		.03	
102c	Stomach, other diseases of	.11	.12	.07	.13	.03	.12	.08
105a	Duodenal ulcer	.08	.08	.23	.08		.07	
105b	Diarrhea	.00	.00		.00		.00	
105c	Enteritis and colitis	.05	.05	.05	.05	.01	.05	
106	Ankylostomiasis (uncinariasis, hookworm).	.00	.00		.00		.00	.08
107a	Ascaris lumbricoides	.02	.02			.19	.02	
1007b	Cestodes	.00	.00		.00		.00	
108	Appendicitis (all)	.13	.14	.16	.14	.09	.14	
109a	Hernia	.72	.73	.41	.75	.70	.75	
109b	Intestinal obstruction	.01	.01		.01		.01	
110a	Fistula in ano	.03	.03		.03	.04	.03	
110b	Intestines, other diseases of	.05	.04	.04	.05	.02	.04	.24
113	Cirrhosis of the liver	.01	.01	.02	.01	.03	.01	.08
114	Cholelithiasis	.00	.00	.02				
115a	Cholecystitis	.03	.03	.04	.03	.01	.03	
115b	Gall bladder and bile duct, other diseases of.	.00	.00		.00		.00	
115c	Liver, other diseases of	.00	.00		.00		.00	
117b	Peritoneal adhesions	.07	.08	.05	.08	.06	.08	
118a	Pancreatitis	.00	.00		.00		.00	
118b	Visceroptotis	.01	.01		.01		.01	
118c	Digestive system, other diseases of.	.02	.02		.03		.02	

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
.....	.....	0.04	0.00	0.00	.....	.....	.....	.....	.....	81d
0.04	0.04	.04	.04	.04	.....	0.01	0.03	0.01	0.01	82
.08	.12	.04	.11	.11	.....	.03	.....	.03	.03	83a
.04	.16	.07	.15	.14	.....	.04	.02	.03	.03	83b
.53	.70	.33	.67	.66	0.08	.06	.02	.06	.06	83c
.15	.33	.04	.30	.29	.04	.02	.....	.02	.02	83d
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84a
.08	.05	.26	.07	.07	.....	.04	.09	.04	.04	84b
.....	.15	.15	.15	.14	.....	.03	.....	.02	.02	85a
.04	.02	.04	.02	.02	.04	.00	.....	.00	.00	85b
.11	.60	.55	.59	.55	.12	.....	.....	.....	.01	85c
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	85e
.04	.30	.07	.28	.26	.04	.05	.03	.04	.04	85f
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	85g
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	85h
1.20	1.64	.81	1.57	1.54	.56	.33	.12	.31	.32	89–90
.15	.38	.26	.37	.35	.16	.12	.09	.12	.12	91
.....	.32	.33	.32	.29	.20	.18	.38	.20	.20	92a
.....	.16	.19	.16	.15	.08	.03	.03	.03	.03	92b
.11	1.31	1.11	1.29	1.20	.12	.24	.27	.25	.24	93a
.08	.36	.37	.36	.34	.20	.29	.19	.28	.28	93b
.34	1.57	1.26	1.54	1.45	.16	.38	.27	.37	.36	93c
.30	.74	.85	.75	.71	.08	.11	.07	.11	.11	96
.....	.04	.04	.04	.04	.04	.03	.03	.03	.03	97
.....	.02	.07	.02	.02	.....	.....	.....	.....	.....	98
.01	.05	.....	.05	.04	.04	.03	.....	.02	.02	99a
.04	.15	.....	.14	.13	.04	.00	.....	.00	.01	99c
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	101
.04	.21	.04	.19	.18	.04	.02	.02	.02	.02	102a
.04	.06	.....	.06	.06	.04	.01	.....	.02	.01	102b
.04	.26	.11	.25	.23	.12	.07	.....	.06	.06	102c
.38	.20	.....	.18	.19	.12	.02	.....	.02	.03	105a
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	105b
.08	.06	.04	.06	.06	.04	.05	.....	.04	.04	105c
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	106
.....	.....	.67	.06	.05	.....	.....	.....	.....	.....	107a
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	107b
.08	.25	.26	.25	.23	.28	.10	.02	.09	.10	108
.56	1.72	2.15	1.76	1.66	.24	.29	.12	.27	.27	109a
.....	.03	.....	.02	.02	.....	.00	.....	.00	.00	109b
.....	.07	.15	.08	.07	.....	.01	.....	.01	.01	110a
.08	.10	.04	.09	.09	.....	.02	.02	.02	.02	110b
.04	.01	.04	.01	.01	.....	.00	.03	.01	.01	113
.....	.....	.....	.....	.....	.04	.....	.....	.....	.00	114
.04	.06	.....	.06	.06	.04	.01	.02	.02	.01	115a
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	115b
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	115c
.11	.23	.22	.23	.22	.....	.....	.....	.....	.....	117b
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	118a
.....	.02	.....	.02	.02	.....	.01	.....	.01	.01	118b
.....	.01	.....	.01	.01	.....	.04	.....	.03	.03	118c

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XI. CIRCULATORY SYSTEM, DISEASES OF—continued.						
81d	Arteries, other diseases of						
82	Embolism and thrombosis						
83a	Hemorrhoids						
83b	Varicocele		0.26		0.18		
83c	Varicose veins						0.20
83d	Phlebitis					0.32	
84a	Status lymphaticus						
84b	Lymphatic system, other diseases of.						
85a	Cardiac arrhythmias						
85b	Cardiac murmurs, not organic						
85c	Cardiac disorders, functional						
85d	Bradycardia						
85e	Heart block						
85f	Tachycardia	0.25					
85g	Hemorrhage						
85h	Circulatory system, other diseases of.						
	XII. RESPIRATORY SYSTEM, DISEASES OF.						
89-90	Bronchitis	.25					
91	Pneumonia, broncho						
92a	Pneumonia, lobar						
92b	Pneumonia, unclassified						
93a	Pleurisy, suppurative			0.65	.18		
93b	Pleurisy, serofibrinous						
93c	Pleura, other diseases of						
96	Asthma					.32	.40
97	Pulmonary emphysema						
98	Lungs, other diseases of		.26		.18		
	XIII. DIGESTIVE SYSTEM, DISEASES OF.						
99a	Pyorrhea alveolaris						
99c	Mouth and annexa, other diseases of.						
101	Esophagus, diseases of						
102a	Ulcer of the stomach						
102b	Gastro-enteroptosis						
102c	Stomach, other diseases of					.64	
105a	Duodenal ulcer						
105b	Diarrhea						
105c	Enteritis and colitis						
106	Ankylostomiasis (uncinariasis, hookworm).						
107a	Ascaris lumbricoides						
107b	Cestodes						
108	Appendicitis (all)						
109a	Hernia	.49				.64	
109b	Intestinal obstruction						
110a	Fistula in ano						
110b	Intestines, other diseases of		.26		.18	.32	
113	Cirrhosis of the liver						
114	Cholelithiasis						
115a	Cholecystitis						
115b	Gall bladder and bile duct, other diseases of.						
115c	Liver, other diseases of						
117b	Peritoneal adhesions						
118a	Pancreatitis						
118b	Visceroptosis						
118c	Digestive system, other diseases of						

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
								81d
								82
	0.10							83a
	.10							83b
0.50	.99							83c
	.20	0.02		0.02				83d
.10	.10							84a
	.20							84b
.10	.30							85a
								85b
	.10	.02		.02				85c
								85d
								85e
.10	.30							85f
	.10							85g
								85h
.69	2.38	.06		.05		0.48	0.48	89–90
.10	.30	.02	0.16	.03				91
	.10	.04		.03				92a
.20	.79							92b
.10	1.59	.02		.02				93a
.20	.30	.04		.03				93b
.20	3.97	.06		.05	0.12			93c
.30	.60				.24		.96	96
	.10							97
	.10							98
.10	.20							99a
	.40							99c
								101
	.10							102a
								102b
	.10					.48		102c
	.10							105a
								105b
								105c
							.48	106
								107a
								107b
.10	.20							108
.40	1.09							109a
								109b
.10	.20							110a
	.10				.24	.48		110b
		.02		.02			.48	113
								114
								115a
								115b
								115c
	.10							117b
								118a
								118b
								118

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).							
119	Nephritis, acute	0.06	0.06	0.09	0.06	0.01	0.06	.....
120	Nephritis, chronic	.61	.62	.23	.66	.32	.64	0.16
122a	Abscess perinephritic	.00	.00	.....	.00	.....	.00	.....
122b	Nephroptosis	.01	.01	.....	.01	.....	.01	.....
122c	Hydronephrosis	.01	.01	.....	.01	.....	.01	.....
122d	Pyogenic infection of the kidneys	.05	.05	.04	.05	.03	.05	.....
122e	Kidney and annexa, other diseases of.	.01	.01	.02	.01	.01	.01	.....
123	Nephrolithiasis	.03	.03	.04	.03	.02	.03	.....
124a	Cystitis	.03	.03	.02	.03	.02	.03	.....
124b	Bladder, other diseases of	.03	.03	.....	.03	.02	.03	.....
125b	Stricture (nonvenereal)	.01	.01	.....	.02	.....	.01	.....
125c	Urethra, other diseases of	.00	.00	.....	.00	.01	.00	.....
126	Prostate, diseases of	.02	.02	.04	.02	.01	.02	.....
127b	Epididymitis (nonvenereal)	.01	.01	.....	.01	.02	.01	.....
127c	Hydrocele	.02	.02	.....	.02	.02	.02	.....
127e	Genito-urinary system, other diseases of (nonvenereal).	.02	.02	.....	.01	.07	.02	.....
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.							
142	Gangrene	.01	.01	.....	.01	.01	.01	.....
144a	Abscess	.02	.02	.02	.02	.05	.02	.08
144b	Cellulitis	.02	.02	.02	.02	.....	.02	.....
145b	Nails, defects and diseases of	.00	.00	.....	.00	.....	.00	.....
145c	Ectoparasites	.00	.00	.....	.00	.....	.00	.....
145e	Dermatitis	.00	.00	.02	.00	.....	.00	.....
145f	Eczema	.02	.03	.04	.03	.....	.02	.....
145g	Erythema	.00	.00	.....	.00	.....	.00	.....
145m	Psoriasis	.03	.03	.04	.03	.01	.03	.....
145n	Scabies	.00	.00	.....	.00	.....	.00	.....
145o	Skin and cellular tissue, other diseases of.	.20	.20	.09	.21	.15	.21	.16
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.							
146a	Osteomyelitis	.08	.08	.02	.07	.09	.09	.24
146b	Fractures, faulty union of	.24	.23	.04	.25	.18	.25	.48
146c	Bones, other diseases of	.08	.08	.07	.08	.04	.08	.08
147a	Ankylosis of joint	.21	.22	.02	.21	.10	.23	.....
147b	Loose bodies in joint	.00	.01	.....	.01	.....	.01	.....
147c	Synovitis	.10	.10	.02	.10	.12	.10	.....
147d	Floating cartilage	.02	.03	.....	.03	.01	.03	.....
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).	.08	.08	.02	.09	.....	.08	.....
149a	Hallux valgus	.07	.07	.02	.08	.04	.07	.08
149b	Hammertoe	.03	.03	.....	.04	.01	.03	.....
149c	Metatarsalgia	.03	.03	.02	.03	.04	.04	.....
149d	Myositis	.03	.03	.04	.03	.03	.03	.....
149e	Pes planus	1.58	1.59	.36	1.71	.90	1.66	.32
149f	Talipes	.02	.03	.02	.03	.01	.03	.....
149g	Tenosynovitis	.02	.02	.....	.02	.02	.02	.....
149h	Organs of locomotion, other diseases of.	.71	.72	.23	.75	.37	.75	.08

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	International classification No.
	White.	Colored.	Total.			White.	Colored.	Total.		
0.08	0.06	0.04	0.06	0.06	0.12	0.08	.....	0.07	0.07	119
.30	.88	.30	.83	.79	.20	.62	0.38	.61	.59	120
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	122a
.....	.01	.....	.01	.01	.....	.01	.....	.01	.01	122b
.....	.02	.....	.02	.02	.....	.....	.....	.....	.....	122c
.08	.12	.07	.11	.11	.....	.01	.....	.01	.01	122d
.04	.03	.....	.02	.02	.....	.00	.02	.00	.00	122e
.04	.08	.04	.08	.07	.04	.01	.02	.01	.01	123
.....	.06	.07	.06	.06	.04	.01	.....	.01	.01	124a
.....	.09	.07	.08	.08	.....	.00	.....	.00	.00	124b
.....	.03	.....	.02	.02	.....	.01	.....	.01	.01	125b
.....	.01	.04	.01	.01	.....	.00	.....	.00	.00	125c
.04	.04	.04	.04	.04	.04	.00	.....	.00	.01	126
.....	.03	.07	.03	.03	.....	.01	.....	.01	.01	127b
.....	.04	.04	.04	.04	.....	.00	.02	.00	.00	127c
.....	.03	.26	.05	.04	.....	.00	.....	.00	.00	127e
.....	.02	.....	.02	.01	.....	.....	.02	.00	.00	142
.04	.04	.11	.04	.04	.....	.01	.03	.02	.02	144a
.04	.03	.....	.03	.03	.....	.02	.....	.01	.01	144b
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	145b
.....	.01	.....	.01	.01	.....	.....	.....	.....	.....	145c
.....	.01	.....	.01	.01	.04	.....	.....	.....	.00	145e
.04	.04	.....	.04	.04	.04	.02	.....	.02	.02	145f
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	145g
.04	.06	.04	.06	.05	.04	.02	.....	.02	.02	145m
.....	.00	.....	.00	.00	.....	.00	.....	.00	.00	145n
.11	.52	.44	.51	.48	.08	.06	.03	.05	.06	145o
.....	.17	.26	.18	.16	.04	.03	.02	.03	.03	146a
.08	.69	.59	.68	.64	.....	.03	.02	.03	.03	146b
.11	.18	.11	.18	.17	.04	.03	.02	.03	.03	146c
.04	.55	.30	.53	.49	.....	.05	.02	.05	.05	147a
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	147b
.....	.22	.33	.23	.21	.04	.05	.03	.05	.04	147c
.....	.08	.04	.07	.07	.....	.00	.....	.00	.00	147d
.04	.21	.....	.20	.18	.....	.02	.....	.02	.02	147e
.04	.19	.15	.19	.18	.....	.02	.....	.02	.02	149a
.....	.10	.04	.09	.09	.....	.00	.....	.00	.00	149b
.....	.08	.15	.09	.08	.04	.01	.....	.01	.01	149c
.08	.06	.07	.06	.06	.....	.02	.02	.02	.02	149d
.41	4.06	2.66	3.94	3.66	.36	.54	.20	.50	.50	149e
.04	.07	.04	.07	.07	.....	.00	.....	.01	.01	149f
.....	.04	.07	.05	.04	.....	.02	.....	.01	.01	149g
.41	1.96	1.07	1.89	1.77	.08	.15	.10	.16	.15	149h

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men.)				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
			Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	XIV. GENITO-URINARY SYSTEM, DISEASES OF (NONVENEREAL).						
119	Nephritis, acute						
120	Nephritis, chronic					0.32	0.20
122a	Abscess perinephritic						
122b	Nephroptosis						
122c	Hydronephrosis						
122d	Pyogenic infection of the kidneys			0.65	0.18		
122e	Kidney and annexa, other diseases of.						
123	Nephrolithiasis					.64	
124a	Cystitis						
124b	Bladder, other diseases of						
125b	Stricture (nonvenereal)						
125c	Urethra, other diseases of						
126	Prostate, diseases of						
127b	Epididymitis (nonvenereal)						
127c	Hydrocele						
127e	Genito-urinary system, other diseases of (nonvenereal).						
	XV. SKIN AND CELLULAR TISSUE, DISEASES OF.						
142	Gangrene						
144a	Abscess						
144b	Cellulitis						
145b	Nails, defects and diseases of						
145c	Ectoparasites						
145e	Dermatitis						
145f	Eczema						
145g	Erythema						
145m	Psoriasis						
145n	Scabies						
145o	Skin and cellular tissue, other diseases of.		0.26		.18		
	XVI. BONES AND ORGANS OF LOCOMOTION, DISEASES OF.						
146a	Osteomyelitis						
146b	Fractures, faulty union of						
146c	Bones, other diseases of					.96	
147a	Ankylosis of joint					.32	
147b	Loose bodies in joint						
147c	Synovitis						
147d	Floating cartilage						
147e	Joints, other diseases of (tuberculosis and rheumatism excepted).					.32	.20
149a	Hallux valgus						
149b	Hammertoe						
149c	Metatarsalgia						
149d	Myositis						
149e	Pes planus		1.55		1.11	4.14	.80
149f	Talipes						
149g	Tenosynovitis						
149b	Organs of locomotion, other diseases of.					.64	.40

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
0.10	0.10							119
.10	1.29					0.96		120
								122a
								122b
								122c
.10	.20							122d
	.30							122e
	.10							123
	.10							124a
								124b
								125b
								125c
		0.02		0.02				126
								127b
.10	.10							127c
								127e
								142
					0.12			144a
.10	.10							144b
								145b
								145c
								145e
								145f
								145g
								145m
								145n
.20	.79					.96		145o
.10	.99					.96	0.48	146a
.50	.60					2.90		146b
	.30					.48		146c
.30	2.38							147a
								147b
.10	.40							147c
.10	.10							147d
.10	.30							147e
	.10				.12			149a
	.10							149b
.10	.20							149c
		.02		.02				149d
1.79	4.56	.09		.08		1.92		149e
								149f
	.10							149g
.69	3.27					.48		149h

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES.							
150	Congenital malformations	0.03	0.03	0.02	0.03	0.01	0.03	.....
189	Not specified or ill-defined diseases	.23	.23	.13	.24	.15	.24	0.16
	Total for diseases	35.95	36.10	17.14	36.65	31.63	37.22	23.63
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.							
1	Bites	.00	.00	.....	.00	.01	.00	.....
2	Burns	.07	.07	.07	.05	.04	.07	.....
3	Burns, chemical and X-ray	.02	.02	.02	.02	.02	.02	.....
4	Compression (brain)	.00	.00	.....	.00	.....	.00	.....
5	Concussion (brain)	.01	.01	.02	.01	.01	.01	.....
6	Contusion	.13	.13	.18	.13	.09	.13	.08
7	Crushing	.23	.23	.13	.22	.18	.24	.08
9	Dislocation of joint	.15	.15	.18	.16	.03	.15	.08
10	Dislocation, articular, cartilage of knee.	.13	.13	.07	.13	.03	.13	.08
12	Epiphyseal separation	.00	.00	.02	.00	.....	.00	.....
13	Eye and annexa, traumatisms	.08	.08	.....	.03	.13	.08	.....
14	Foreign bodies	.02	.02	.....	.02	.....	.02	.....
15	Fracture, simple	1.98	2.00	1.28	2.03	.55	2.01	.56
16	Fracture, compound	1.12	1.13	.41	.99	.49	1.17	.16
17	Fracture, faulty union	.00	.00	.....	.00	.....	.00	.....
18	Gases, deleterious, absorption of	.02	.02	.04	.02	.02	.02	.....
19	Gunshot wound	.00	.00	.....	.00	.....	.00	.....
20	Hemorrhage and results	.00	.01	.....	.01	.....	.01	.....
23	Poisoning, other acute	.....	.....	.....	.....	.....	.....	.....
24	Secondary result of injury	.15	.15	.07	.15	.04	.16	.....
25	Sprain of joint	.40	.40	.43	.39	.24	.40	.....
26	Strain	.05	.07	.05	.07	.02	.07	.....
28	Synovitis, traumatic, cause undetermined.	.13	.13	.16	.13	.05	.13	.....
30	Wounds, multiple	.21	.22	.16	.18	.02	.22	.....
31	Wounds, penetrating	.46	.47	.09	.26	.1[illegible]	.49	.....
32	Wounds, extensive	.00	.00	.....	.00	.....	.00	.....
33	Wounds, perforating	.07	.07	.02	.05	.05	.07	.....
34	Wounds, others	.56	.57	.25	.53	.40	.58	.16
35	Traumatisms, others	.31	.32	.18	.32	.20	.32	.....
	Total for diseases	35.95	36.10	17.14	36.65	31.63	37.22	23.63
	Total for external causes	6.33	6.39	3.83	5.95	2.87	6.51	1.19
	Grand total	42.28	42.49	20.97	42.60	34.50	43.77	24.82
	EXTERNAL AGENTS PRODUCING TRAUMATISM.							
1	Knife	.04	.04	.02	.04	.03	.04	.....
2	Pistol ball	.12	.12	.07	.12	.12	.12	.....
3	Rifle ball	.28	.29	.02	.29	.15	.33	.....
4	Shotgun	.03	.03	.....	.04	.01	.03	.....
5	Cutting and piercing instruments (other).	.19	.20	.02	.21	.17	.21	.08
6	Other military agents	.77	.78	.31	.41	.20	.80	.08
8	Air machines	.12	.12	.32	.11	.....	.11	.....
9	Automobiles	.30	.30	.20	.32	.05	.30	.08
10	Motorcycles	.34	.34	.43	.35	.01	.33	.....
11	Railroad accidents	.33	.34	.11	.34	.31	.35	.....
12	Street-car accidents	.03	.03	.05	.03	.01	.03	.....
13	Other vehicles	.29	.29	.07	.31	.18	.30	.....
14	Animals	.13	.14	.02	.16	.01	.14	.....

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					International classification No.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
	Enlisted men.					Enlisted men.				
Officers.	White.	Colored.	Total.	Total officers and enlisted men.	Officers.	White.	Colored.	Total.	Total officers and enlisted men.	
.....	0.09	0.04	0.08	0.08	0.04	0.01	.....	0.01	0.01	150
0.23	.46	.41	.46	.44	.04	.14	0.05	.14	.13	189
24.19	77.69	76.49	77.58	73.32	11.52	17.85	14.95	17.78	17.51	
										Office classification.
.....	.....	.....	.....	.....	.....	.00	.02	.01	.01	1
.05	.05	.....	.05	.05	.08	.08	.07	.08	.08	2
.01	.04	.04	.04	.04	.....	.01	.....	.01	.01	3
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	4
.....	.01	.....	.01	.01	.04	.01	.02	.01	.01	5
.12	.09	.11	.09	.10	.24	.16	.09	.15	.16	6
.....	.24	.18	.23	.22	.28	.24	.20	.25	.25	7
.16	.18	.07	.17	.17	.20	.15	.02	.14	.14	9
.....	.18	.07	.17	.15	.16	.11	.02	.11	.11	10
.....	.....	.....	.....	.....	.04	.00	.....	.00	.00	12
.....	.09	.07	.09	.08	.....	.05	.17	.08	.07	13
.....	.04	.....	.03	.03	.....	.01	.....	.01	.01	14
.68	1.88	.30	1.74	1.65	2.02	2.30	.73	2.21	2.20	15
.28	.92	.26	.86	.82	.64	1.11	.63	1.16	1.14	16
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	17
.....	.03	.04	.03	.02	.08	.02	.02	.02	.02	18
.....	.00	.....	.00	.00	.....	.....	.....	.....	.....	19
.....	.00	.....	.00	.00	.....	.01	.....	.01	.01	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
.0	.30	.11	.28	.27	.04	.07	.....	.07	.07	24
.48	.47	.30	.45	.45	.48	.39	.22	.38	.39	25
.08	.06	.04	.06	.06	.....	.07	.02	.07	.06	26
.04	.17	.07	.16	.15	.32	.13	.05	.12	.13	28
.20	.20	.....	.18	.18	.16	.19	.14	.20	.20	30
.08	.20	.18	.20	.19	.12	.31	.20	.37	.36	31
.....	.....	.....	.....	.....	.....	.00	.....	.00	.00	32
.....	.04	.15	.05	.05	.01	.08	.02	.07	.07	33
.20	.50	.33	.49	.46	.28	.59	.46	.59	.58	34
.16	.37	.11	.35	.33	.24	.32	.27	.33	.32	35
24.19	77.69	76.49	77.58	73.32	11.52	17.85	14.95	17.78	17.51	
2.66	6.07	2.44	5.75	5.45	5.48	6.41	3.36	6.44	6.40	
26.85	83.76	78.93	83.33	78.8	17.00	24.26	18.31	24.22	23.91	
.01	.04	.07	.04	.04	.....	.07	.02	.04	.04	1
.11	.07	.11	.07	.07	.04	.16	.14	.16	.16	2
.01	.23	.15	.22	.21	.....	.3	.17	.3	.33	3
.....	.09	.04	.08	.07	.....	.01	.....	.01	.01	4
.01	.27	.11	.25	.24	.....	.19	.20	.19	.18	5
.23	.36	.15	.34	.33	.36	.46	.26	.59	.58	6
.....	.18	.....	.16	.15	.73	.09	.....	.08	.11	8
.....	.36	.18	.35	.32	.44	.34	.....	.32	.32	9
.34	.26	.....	.23	.24	.60	.46	.02	.42	.43	10
.04	.30	.37	.31	.28	.20	.40	.32	.42	.41	11
.07	.07	.....	.06	.06	.04	.02	.02	.02	.02	12
.....	.16	.07	.15	.14	.16	.43	.24	.42	.41	13
.....	.23	.....	.21	.19	.01	.13	.02	.12	.12	14

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

International classification No.	Disease.	Officers, other countries.	American troops in other countries (enlisted men). Philippine Islands. White.	Philippine Islands. Colored.	Philippine Islands. Total.	Hawaii. White.	Panama. White.
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	XVII. CONGENITAL MALFORMATIONS AND ILL-DEFINED DISEASES—Con.						
150	Congenital malformations						
189	Not specified or ill-defined diseases						0.40
	Total for diseases	5.16	8.76	7.14	8.30	18.47	7.80
Office classification.	TRAUMATISMS PRODUCED BY EXTERNAL CAUSES.						
1	Bites						
2	Burns						
3	Burns, chemical and X-ray						
4	Compression (brain)						
5	Concussion (brain)						
6	Contusion	.25	.26		.18	.32	
7	Crushing					.64	
9	Dislocation of joint	.25	.52		.37	.32	
10	Dislocation, articular, cartilage of knee					.64	.20
12	Epiphyseal separation						
13	Eye and annexa, traumatisms						
14	Foreign bodies						
15	Fracture, simple	.98	.52		.37	.96	.20
16	Fracture, compound		.26	1.30	.55	.64	
17	Fracture, faulty union						
18	Gases deleterious, absorption of						
19	Gunshot wound						
20	Hemorrhage and results						
23	Poisoning, other acute						
24	Secondary result of injury	.25	.26	.65	.37	.32	.20
25	Sprain of joint					1.27	
26	Strain	.25					
28	Synovitis, traumatic, cause undetermined						
30	Wounds, multiple						.20
31	Wounds, penetrating						.20
32	Wounds, extensive						
33	Wounds, perforating						
34	Wounds, others	.49					.60
35	Traumatisms, others		.26		.18	.32	.20
	Total for diseases	5.16	8.76	7.14	8.30	18.47	7.80
	Total for external causes	2.46	2.06	1.95	2.03	5.41	1.80
	Grand total	7.62	10.82	9.09	10.33	23.88	9.60
	EXTERNAL AGENTS PRODUCING TRAUMATISMS.						
1	Knife						
2	Pistol ball						
3	Rifle ball						
4	Shotgun		.26		.18		.20
5	Cutting and piercing instruments (other)						.60
6	Other military agents	.49					.40
8	Air machines						
9	Automobiles						
10	Motorcycles					.32	
11	Railroad accidents					.32	
12	Street car accidents		.26		.18		
13	Other vehicles			.65	.18	.32	
14	Animals					.64	

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			International classification No.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
	0.10							150
.10	.79						.96	189
27.67	114.66	0.81	0.32	0.76	21.69	36.43	18.64	
								Office classification.
								1
	.60							2
	.10							3
								4
.10	.20							5
	.50	.04		.03	.12			6
.10	.99	.02		.02		.48		7
.30	.79	.02		.02	.12			9
.20	.79	.02		.02			.48	10
								12
.10	.99							13
.20	.30							14
3.47	13.69	.49		.43	.12	1.44	1.43	15
2.58	19.04	.04		.03		.96		16
								17
	.20							18
								19
								20
								23
.69	1.88	.02		.02				24
.40	2.08	.02	.16	.03				25
.30	.69							26
.40	.79							28
.30	3.87							30
.90	19.04	.04		.03				31
								32
.20	1.09							33
.79	6.55	.10	.16	.10	.24			34
.50	1.49							35
27.67	114.66	.81	.32	.76	21.69	36.43	18.64	
11.51	75.68	.79	.32	.74	.60	2.90	1.91	
39.18	190.34	1.60	.64	1.50	22.29	39.33	20.55	
.10	.10							1
.10	.30							2
.60	2.28							3
	.10							4
.10	.40	.06	.16	.07	.12			5
2.28	32.24							6
.30	.40							8
.10	.40					.48	.48	9
.40	.69							10
.40	.79							11
								12
.30	.60							13
.10	.10	.02		.02				14

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

Office classification.	Traumatisms.	Total United States Army.						
	Mean strength	1,005,047	992,478	55,554	843,451	93,474	936,924	12,569
		Total officers and enlisted men, including native troops.	Total officers and enlisted men, American troops.	Total officers.	Total enlisted men, American troops.			Total native troops.
					White.	Colored.	Total.	
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.							
16	Crushing	0.26	0.26	0.13	0.27	0.21	0.27	.....
17	Electricity	.02	.02	.....	.02	.02	.02	.....
18	Fall	.96	.97	1.15	.99	.37	.96	0.48
19	Falling objects	.14	.14	.04	.16	.03	.15	.....
20	Splinters	.01	.01	.....	.01	.01	.01	.....
21	Machinery	.06	.06	.....	.07	.02	.06	.08
22	Other industrial agents	.14	.14	.05	.13	.13	.14	.08
23	Excessive cold	.02	.02	.....	.02	.03	.02	.....
24	Excessive heat	.00	.00	.....	.00	.....	.00	.....
27	Stones	.02	.02	.....	.02	.05	.02	.....
29	Jumping	.05	.05	.04	.05	.03	.05	.....
30	Hot liquids	.03	.04	.05	.04	.01	.03	.....
31	Fire, conflagrations excepted	.00	.00	.....	.00	.01	.00	.....
33	Athletic exercises	.36	.37	.16	.39	.17	.38	.08
34	Drilling and marching	.04	.04	.04	.04	.02	.04	.08
35	Fighting (brawls)	.01	.01	.....	.01	.01	.01	.....
36	Other external agents	1.23	1.24	.54	1.02	.46	1.29	.16
	Total	6.39	6.39	3.83	5.95	2.87	6.54	1.19

The ratio for discharges shown above are shown under the diagnosis.

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

United States Army in United States (including Alaska).					United States Army in Europe (excluding Russia).					Office classification.
26,669	279,926	27,037	306,963	333,632	24,818	488,139	58,599	546,738	571,556	
Officers.	Enlisted men.			Total officers and enlisted men.	Officers.	Enlisted men.			Total officers and enlisted men.	
	White.	Colored.	Total.			White.	Colored.	Total.		
.....	0.28	0.26	0.28	0.26	0.28	0.29	0.22	0.29	0.29	16
.....	.....	.....	.....	.....	.....	.03	.03	.03	.03	17
0.98	.92	.26	.86	.87	1.33	1.09	.48	1.05	1.07	18
.07	.13	.11	.12	.12	.....	.19	.....	.17	.16	19
.....	.01	.04	.01	.01	.....	.01	.....	.01	.01	20
.....	.08	.04	.08	.07	.....	.06	.02	.06	.06	21
.....	.09	.07	.08	.08	.12	.18	.17	.18	.18	22
.....	.02	.04	.02	.02	.....	.01	.03	.01	.01	23
.....	.01	.....	.01	.01	.....	.00	.....	.00	.00	24
.....	.02	.11	.03	.02	.....	.02	.03	.02	.02	27
.04	.05	.04	.05	.04	.04	.06	.03	.05	.05	29
.07	.03	.....	.03	.03	.04	.05	.02	.04	.04	30
.....	.....	.....	.....	.....	.....	.00	.02	.01	.01	31
.07	.45	.18	.43	.40	.24	.40	.19	.39	.39	33
.07	.06	.04	.06	.06	.....	.04	.....	.03	.03	34
.....	.01	.....	.01	.01	.....	.01	.....	.01	.01	35
.30	1.32	.....	1.20	1.13	.81	.88	.72	.91	.91	36
2.66	6.07	2.44	5.75	5.49	5.48	6.41	3.36	6.44	6.40	

TABLE XXII.—*Discharges for disability United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

Office classification.			American troops in other countries (enlisted men).				
	Mean strength	4,067	3,882	1,540	5,422	3,140	5,001
	Traumatisms.	Officers, other countries.	Philippine Islands.			Hawaii.	Panama.
			White.	Colored.	Total.	White.	White.
	EXTERNAL AGENTS PRODUCING TRAUMATISMS—continued.						
16	Crushing		0.52		0.37	0.32	
17	Electricity						
18	Fall	1.23	.77		.55	1.27	0.40
19	Falling objects					.32	
20	Splinters						
21	Machinery					.32	
22	Other industrial agents						
23	Excessive cold						
24	Excessive heat						
27	Stones						.20
29	Jumping						
30	Hot liquids						
31	Fire, conflagrations excepted						
33	Athletic exercises	.25	.26		.18	.64	
34	Drilling and marching						
35	Fighting (brawls)			.65	.18		
36	Other external agents	.49		.65	.18	.96	
	Total	2.46	2.06	1.95	2.03	5.41	1.80

The ratios for discharges shown above are shown under the diagnosis.

TABLE XXII.—*Discharges for disability, United States Army, 1919*—Continued.

RATIOS PER 1,000—Continued.

American troops in other countries (enlisted men).					Native troops (enlisted men).			Office classification.
10,082	10,082	53,280	6,298	59,578	8,391	2,086	2,092	
Other countries and not stated.		Transports.			Philippine Scouts.	Hawaiians.	Porto Ricans.	
White.	Total.	White.	Colored.	Total.				
0.10	0.30	0.02	.....	0.02	.....	.....	.....	16
.....	.....	.....	.....	.....	.....	.....	.....	17
1.39	2.08	.45	.....	.40	0.24	1.44	0.48	18
.20	.30	.08	.....	.07	.....	.....	.....	19
.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.10	.....	.....	.....	.....	.....	.....	21
.....	.99	.....	.....	.....	.....	.....	.....	22
.10	.10	.....	.....	.....	.....	.....	.....	23
.....	.....	.....	.....	.....	.....	.....	.....	24
.....	.....	.....	.....	.....	.....	.....	.....	27
.20	.20	.....	.....	.....	.....	.....	.....	29
.....	.....	.....	.....	.....	.....	.....	.....	30
.....	.....	.....	.....	.....	.....	.....	.....	31
.20	.60	.....	.....	.....	.....	.48	.48	33
.10	.20	.....	.16	.02	.12	.....	.....	34
.10	.20	.....	.....	.....	.....	.....	.....	35
4.36	32.24	.17	.....	.15	.12	.48	.48	36
11.51	75.68	.79	.32	.74	.60	2.90	1.91	

KEY FOR INDEX.

Key for each letter used as a suffix to page numbers. Capital letters signify countries. Small letters signify general hospitals in the United States.

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REPORT OF THE

SURGEON GENERAL

U. S. ARMY

TO THE SECRETARY OF WAR

1921

WASHINGTON
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1921

Columbia University
College of Physicians and Surgeons

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REPORT OF THE SURGEON GENERAL OF THE ARMY.

LETTER OF TRANSMISSION.

OCTOBER 6, 1921.

I have the honor to submit herewith the annual report of this office for the year 1921, covering the general activities of the Medical Department for the fiscal year ending June 30, 1921, and containing the vital statistics for the United States Army for the calendar year ending December 30, 1920.

During the period covered by this report the activities of the Medical Department were less extensive than they had been during the three preceding years, while the war Army was being mobilized, was engaged in combat with a military enemy, and its members were being demobilized to return to their several vocations in civil life. Although the activities of the Medical Department were much more limited during the past year than during the years referred to, the rapid demobilization of the members of the medical profession, who had accepted temporary commissions for service with the war Army, left a relatively large amount of work to be done by officers of the Regular service and by the Reserves who remained on active duty. In addition to the routine work of the department, with the care of the sick of the Regular Army, professional care and treatment had to be provided for the sick and wounded of the war Army who were remaining in hospital at the beginning of the period. These cases required an unusual amount of attention, for as the residue of the sick and wounded from the war Army, they were all cases of chronic types, usually with persistent infections, which it was difficult to control and to eradicate. The recruiting for the Army during 1920, with the expansion following the act of June 4, 1920, also threw an additional burden on the department. It was not only necessary to conduct the physical examinations, but the enlistment of a considerable number of recruits of immature age and of others with physical defects increased the amount of sickness in the service and the number of cases that it was necessary to discharge as physically unfit. These duties, together with the distribution of the Army in this country as well as abroad, and with the several changes that were made necessary by congressional acts, in addition to the requirements for training and for the care of the beneficiaries of the Veterans' Bureau, have frequently taxed the remaining personnel of the department.

Commissioned personnel.—Following the passage of the act of June 4, 1920, plans were at once made to increase the commissioned and enlisted personnel of the Medical Department, and a number of temporary officers who had served during the World War were found qualified and commissioned. The Medical Corps increased from 782 on July 1, 1920, to 1,174 on June 30, 1921, the Dental Corps from 196 to 246, the Veterinary Corps from 85 to 159, and the Medical

Administrative Corps, which was authorized by the act of June 4 to replace the Sanitary Corps, numbered 138 on July 1, 1921. Due, however, to the demobilization of the temporary and reserve officers more rapidly than the necessary work of the department warranted, even with this increase, the commissioned medical personnel was often inadequate to meet all needs. The present personnel is barely adequate to properly perform the functions of the department with the Regular Army, leaving few if any officers available for the care of the beneficiaries of the Veterans' Bureau or for duty with training units with the National Guard, organized Reserves, and Reserve Officers' Training Corps, and at training camps. However, as a result of the subsequent reduction of the enlisted strength of the Army by the acts of Congress, the number of commissioned officers in the Medical Department at the present time exceeds the allowance.

Army Nurse Corps.—On June 30, 1920, 1,045 Regulars and 506 Reserves were on active duty with the Army Nurse Corps, and on June 30, 1921, 704 Regulars and 147 Reserves. The first graduating exercises of the Army School of Nursing were held at the Walter Reed General Hospital from June 12–17, 1921, and at the Letterman General Hospital, San Francisco, Calif., from July 10–15. Diplomas were presented to 404 students at the Walter Reed General Hospital and 108 at the Letterman General Hospital.

Enlisted personnel.—The enlisted personnel of the Medical Department was reduced from 14,819 on June 30, 1920, to 13,131 on June 30, 1921.

Medical Department reserve officers.—The number of reserve officers of the Medical Department was increased as follows from July 1, 1920, to June 30, 1921: Medical Corps, 5,611 to 5,768; Dental Corps, 3,699 to 3,761; Veterinary Corps, 331 to 368; Sanitary Corps, 0 to 245; and Medical Administrative Corps, 0 to 466. It was necessary during the year to call into active service for a period not exceeding six months, to supplement the Regular Corps, reserve officers as follows: Medical Corps, 69; Dental Corps, 32; and Veterinary Corps, 15. Forty-one reserve officers were retained on the active list after June 30, 1920, under the provisions of the Army appropriation act for the fiscal year 1921, to supplement the Regular Medical Corps in the care and treatment of the beneficiaries of the Veterans' Bureau in the Army hospitals.

General hospitals.—On June 30, 1920, there were nine general hospitals with an authorized capacity of 7,100 beds, of which number 5,083 were occupied. During the year two of these, the Hoff General Hospital, Staten Island, N. Y., and the O'Reilly General Hospital, Oteen, N. C., were turned over to the Public Health Service for the care and treatment of beneficiaries of the War Risk Insurance Bureau, and a third, the Lawson General Hospital at Atlanta, Ga., reverted to its former use as a post hospital, Fort McPherson, Ga. Consequently, on June 30, 1921, six hospitals were in operation, with an authorized capacity of 4,514 beds, and 3,430 of them were occupied. These general hospitals have an additional "emergency" capacity of 1,200 beds, for which the material to equip them is available at the hospital, and 4,450 "expansion" beds, for which the shelter is now under the jurisdiction of the commanding officer of the hospital, but for which neither the personnel nor the material is available at

these places. On June 30, 1921, all of the war patients (officers excepted) who were still remaining in the hospital, were discharged from the military service. These patients, however, were not discharged from the hospitals, but such as elected to do so were continued in the hospital and taken up, on July 1, 1921, as beneficiaries of the Veterans' Bureau. Plans are being formulated to care for an additional number of the beneficiaries of the bureau. Something over a thousand of them with tuberculosis will ultimately be cared for at the Fitzsimons General Hospital, Denver, Colo., and approximately 200 cases of arthritis, articular rheumatism, and neuritis at the Army and Navy General Hospital, Hot Springs, Ark., in addition to those cared for in the other general hospitals.

Unsatisfactory character of recruits.—Practically all of the corps area and department surgeons report that the character of recruits enlisted during the year was very unsatisfactory. Some of the comments are: "Never in the history of the Army has its ranks been filled with such poor physical specimens and such young lads so susceptible to disease." "The heavy rate of discharge on certificate of disability, for disability existing prior to enlistment, suggests a reconsideration of the policy regarding the strict appliance of adherence to published and official standards." "It is noted that a large majority of cases appearing before the disability boards have disabilities which existed prior to enlistment, and a number of cases have been previously discharged from the military service with the same disability. It would seem that a great deal of laxity existed in the recruiting system which permitted the enlistment of these men." "Many comments have been offered by medical officers in regard to the inferior mental and physical qualifications of the class of enlisted men taken into the service." "Many of the enlisted personnel of this command should have never been enlisted, as they are poorly developed physically, mentally, and morally, which increases the difficulties encountered in controlling venereal disease."

VITAL STATISTICS.

The distribution of the Army.—During the calendar year 1920 enlisted men of the United States Army served in the following countries: White enlisted men in the continental United States, Alaska, Europe, Philippine Islands, Hawaii, Panama Canal Zone, and China and for approximately three months in Siberia; colored (negro) enlisted men in the United States and the Philippine Islands; native Filipino troops in the Philippine Islands; and the native Porto Ricans in Porto Rico and also in Panama during the latter part of December.

Strength of the Army.—The strength of the Army as published in the reports of this office and as used in the calculation of comparative rates, for the vital statistics, is an average of the daily strengths, and is obtained from reports rendered to this office by the senior medical officers of every separate command or station attended by one. Including officers and enlisted men, both American and native troops, the mean annual strength as obtained from these reports for the calendar year 1920 was 209,464. It increased from 215,580 in January, 1920, to 228,797 in December, although it had shown a material decline during the summer months, with the minimum in July, 198,159.

This strength of necessity differs from that published in the reports of the Adjutant General of the Army, which is the strength as of the last day of each month. This latter accounts more completely for the entire military personnel, since reports are received in that office from every command or detachment, including those on detached duty which have no commissioned Medical Department personnel on duty with them.

Health of the Army.—The health of the Army during the year was satisfactory, although there were several factors which increased the amount of sickness, with the attending deaths and discharge for disability cases, as well as the loss of time. These causes in brief were:

(*a*) Influenza, which had reappeared among the forces in Germany in epidemic form in December, 1919, continuing through January, 1920, appeared among the troops in the United States in the early part of the latter months.

(*b*) There was an increase in the amount of sickness and in the number of discharges for disability, following the enlistment of many recruits of immature age, in addition to many with disqualifying defects.

(*c*) A number of deaths and discharges for disability, with the attending loss of time, occurred among the war sick and wounded who were remaining in Army hospitals at the beginning of the year.

(*d*) A pronounced epidemic of dengue occurred among the white troops in the Philippine Islands.

(*e*) There was an increase in the number of cases of venereal diseases among the white troops who were serving in the Philippine Islands, China, and Panama.

Admissions.—The total number of military patients admitted to Army hospitals for the treatment of conditions not previously treated in the service amounted to 148,047 for diseases and 25,953 for injuries, with a total of 174,000 for all causes. The annual admission rate per 1,000 for diseases was 706.79, for injuries 123.90, and for the total 830.69. Practically 83 men out of every 100 were treated at some time during the year for some disease or injury for which they had not been previously treated in the military service. This rate was somewhat higher than the one for the preceding year (614.54). This increase occurred both in the rate for diseases and for injuries. Some of the apparent reasons for the increase were:

(*a*) The rate for white troops in the Philippine Islands increased as the result of the dengue epidemic and the increase among them of the number of cases of venereal disease.

(*b*) The rate for white troops in Panama also increased, due largely to the increase in the number of cases of venereal disease.

(*c*) The rate in Europe practically doubled (478.81 in 1919 and 941.85 in 1920) as a result of the change during 1919 in the Army of Occupation from the seasoned veterans of the war Army to Regular troops, with a relatively large number of unseasoned recruits, in addition to the change in system of reporting the sick, all cases being reported for the Regular Army, whereas only the severer type of cases or hospital cases were reported for the war Army.

(*d*) The increase in the rate for the Porto Rican troops.

Both the colored (negro) troops and the native Filipino troops showed reductions.

Deaths.—In the previous annual reports from this office only the deaths that occurred during the year have been considered. In order, however, that more accurate case mortality or the percentage of deaths to the number of cases may be computed, it has been decided to include hereafter only the deaths that occur as the result of cases admitted during the calendar year, even though some of them occur in the year following—for example, deaths for 1920 cases occurring in the early part of the year 1921.

However, that all deaths not previously shown in a report might be shown, the additional ones that occurred in 1920 as the result of cases admitted prior to 1920, are included in this report. These remarks apply also to discharges for disability and to days lost. This results in an abnormal number of deaths, discharges, and days lost being shown in this report, but provisions have been made to show in the totals for the appendix tables and in certain of the text tables these data for the 1920 cases only or for the one year's cases. These can be compared with similar data for one year, which are included in previous reports and will be included in succeeding ones.

The total number of deaths shown that occurred as the result of diseases was 979, of injuries 469, with a total of 1,448. Of this number 263 for diseases and 11 for injuries were from cases which were remaining in hospital at the beginning of the year. Including all the cases considered, the annual death rate for disease was 4.67 per 1,000 men, for injuries, 2.24, with a total of 6.91. For one year's cases the rate for disease was 3.42, for injuries 2.19, and 5.60 for the two. These rates compared very favorably with those for the preceding year, where they were 7.61 for diseases, 1.34 for injuries, and 8.95 for the two.

Discharges.—The total number of discharges for disability, including all cases, was 10.395. Only 4,873 of these occurred among patients admitted during 1920, while 5,522 of them were properly chargeable to the war Army. There were 3,140 due to tuberculosis, of which the majority were also from the war Army.

Days lost.—The total number of days lost for all cases considered was 3,852,130, 2,956,260 of these patients' days being chargeable to the one year's cases and the excess to the patients of the war Army. The noneffective rate for the one year's cases was for diseases, 32.18, for injuries, 6.38, with a total of 38.56. An average of practically 3.9 men of each 100 were absent from duty on account of sickness or injuries every day of the year. This rate compared very favorably with that for the preceding year, when it was 5.1 per 100 for all causes.

Influence of race.—For the color races the relative standing of the health ratings was: The Porto Ricans had the highest admission, noneffective, and discharge for disability rates, with the lowest death rate; the colored troops had the highest death rate, but stood third for admissions, noneffectives, and discharges for disability; the white troops stood second for the admissions, deaths, noneffectives, and discharges for disability; and the Filipino native troops stood fourth for the admission, noneffective, and discharge for disability rates, and third for deaths.

Influence of climate.—Considering the influence of climate, and excluding Siberia, since the last troops were removed from there in March, the relative standing of the rates for the white troops were:

The Philippine Islands had the highest admission and discharge rates; the second highest noneffective rate, but stood fourth for the deaths; the United States stood fourth for the admission and noneffective rates, third for deaths, and second for discharge for disability; Europe stood third for admissions and noneffective rates, second for deaths, and fifth for discharges for disability; Panama stood fifth for the admission and death rates, fourth for discharges for disability, and sixth for noneffectives; Hawaii stood sixth for the admission and death rates, third for the discharge for disability rate, and fifth for the noneffective rate; China stood second for the admissions, first for the deaths and noneffectives, and sixth for the discharge for disability rates.

Influenza.—The influenza epidemic which had reappeared among the troops in Germany in December, 1919, and among the troops in this country in January, 1920, together with the pneumonias not attributed to it and with the other respiratory diseases, such as acute rhinitis, tonsillitis, pharyngitis, and laryngitis, caused a relatively larger amount of sickness among the troops in the United States than any of the other epidemics of these diseases had caused during the period of the World War, with the exception of the one which occurred in the late summer and fall of 1918, while for the troops in Europe these diseases caused a relatively greater amount of sickness than they had even during the great pandemic of 1918. The relative number of deaths that resulted from influenza and the primary pneumonias was much smaller both for the troops in the United States and in Europe than there had been during the pandemic of 1918, but greater than there had occurred during any of the other epidemics of these diseases during the World War. The actual number of deaths for 1918 cases in the United States was 234, and in Europe, 22.

Measles.—Measles occurred among recruits in epidemic form at several of the posts. There were 2,346 cases in the United States, and 101 in Europe. The admission rate for the white troops in the United States was higher than that for any other year during the past decade, with the exception of the rates for 1911, 1917, and 1918. Six hundred and seventy-seven of the cases for these troops occurred in December, when there was a greater number of cases in proportion to the number of troops than there had been during any month in 1919 or in 1918, with the exception of January, 1918. Fortunately, however, there were relatively few deaths, there being only 13 in the United States and 4 in Europe for the 1920 cases, with 2 additional ones in the United States and 9 in Europe for cases remaining at the beginning of 1920 from the preceding year.

Venereal diseases.—The rate for venereal diseases for white troops in the United States showed a very material decrease over that for the preceding year. This was especially gratifying, in view of the fact that the corresponding rates showed a very pronounced increase after the Civil and Spanish-American Wars, when the war armies were demobilized and were replaced by volunteers for the Regular Army. During 1920 a relatively large number of recruits were enlisted. Venereal diseases in the past have been more prevalent among recruits, due in part to the inability of the medical officers conducting the physical examinations to detect and exclude all chronic cases and all cases in the incubation stage, and in part to a

proportionately larger number of recruits acquiring infections after admission to the military service. That the rates for this class of disease should have shown a material decrease, notwithstanding these adverse factors, should be gratifying not only to the military authorities, but also to the other Federal and local health authorities who are all united in an effort to control this class of disease. Unfortunately, however, apparently due to the large number of recruits sent to the Philippine Islands and Panama, with the inability of the military authorities to control the conditions in the surrounding civil communities, the rates for venereal disease in both places showed a material increase over those for several preceding years.

Other infectious diseases.—Other infectious diseases, namely: Scarlet fever, diphtheria, cerebro-spinal meningitis, mumps, and german measles, were satisfactorily controlled during the year. This is also especially gratifying, since in the absence of well-regulated sanitary measures more cases would normally have occurred among such a large number of recruits of immature age.

Malarial fevers.—Unfortunately due to the insufficiency of funds to continue satisfactorily the antimalarial campaign, the rates for this class of fevers for white troops in the United States showed an increase over the rates for the three years of the war Army. It was, however, much lower than those for 1916 and the years preceding. It is, however, gratifying to note that this rate for the white troops in the Philippine Islands and in Panama was exceptionally low, it being the lowest recorded for them in the Philippine Islands during the past decade or in Panama, with the exception of that for the year 1911. There was only one death for 1920 cases; that one occurred in Panama.

Typhoid fever.—This disease, which has practically ceased to be a source of grave concern to the sanitary authorities of the Army since the compulsory use of the typhoid vaccine in 1921, caused the admission of only 14 cases, with one death during the year.

Dengue.—A very pronounced epidemic of dengue occurred among the white troops serving in the Philippine Islands, with a total of 2,240 cases. There were relatively more cases than there had occurred at any time during the past decade. Only eight cases were recorded among the colored troops in the Philippine Islands, and 119 among the native Filipino troops.

Very respectfully,

M. W. IRELAND,
Surgeon General, United States Army.

The SECRETARY OF WAR.

HEALTH OF THE ARMY.

STRENGTH OF THE ARMY.

There was little difficulty experienced during the calendar year 1920 in obtaining accurate monthly and annual strengths (average daily strengths) for the United States Army in all countries where our troops were serving, for officers, and for enlisted men, and for the latter separately, for white, colored (Negro), Filipino, and Porto Rican troops. Monthly returns were furnished to this office from each separate command, both at home and abroad, with definite information for rank and color.

The total number of enlistments for American troops during the year as shown in Table 1, which was prepared from information obtained from the office of the Adjutant General of the Army, amounted to 163,633. Of this number 158,563 were white men and 5,070 were colored (Negro).

TABLE 1.—*Enlistments, 1920, by months.*[1]

Month.	White.	Colored.	Total.
January	9,609	107	9,716
February	8,927	72	8,999
March	10,418	52	10,470
April	7,308	74	7,382
May	7,765	265	8,030
June	10,543	578	11,121
July	14,073	1,041	15,114
August	14,922	2,008	16,930
September	14,079	255	14,334
October	15,760	357	16,117
November	20,581	133	20,714
December	24,578	128	24,706
Grand total	158,563	5,070	163,633

[1] Source of information: Office of the Adjutant General of the Army.

The number of enlistments of Filipino and Porto Rican troops are not shown.

The strength of the Army, including all officers and all enlisted men, both American and native troops, for December, 1919, was 211,742 (see Table 44, Report 1920), and that for January, 1920, 215,580. The enlistments and reenlistments during the year 1920 exceeded the discharges, the strength in December being 228,797 as compared with 215,580 in January. The strength for the officers showed a decrease from 15,551 in January to 12,994 in December; the white troops showed an increase from 179,090 to 197,969; the colored showed a decided decrease from 10,505 to 8,959; and the native troops also showed a decided decrease from 10,434 to 8,875. It is thus apparent that only the white troops increased in number during the year.

TABLE 2.—*Strength of Army, 1920* [1] *(excluding Army Nurses).*

Month.	Total officers.	Enlisted men, American troops.			Officers and enlisted men, American troops.	Total enlisted, native troops.	Enlisted men, American and native troops.	Officers and enlisted men, including native troops.
		White.	Colored.	Total.				
January	15,551	179,090	10,505	189,595	205,146	10,434	200,029	215,580
February	15,060	183,006	10,716	193,722	208,782	10,185	203,907	218,967
March	14,872	180,914	10,800	191,714	206,586	9,143	200,857	215,729
April	15,029	177,780	10,648	188,428	203,457	8,368	196,796	211,825
May	14,872	173,750	9,970	183,720	198,592	8,544	192,264	207,136
June	14,470	167,551	9,705	177,256	191,726	8,456	185,712	200,182
July	14,275	168,061	7,519	175,580	189,855	8,304	183,884	198,159
August	14,381	169,062	8,633	177,695	192,076	8,082	185,777	200,158
September	13,485	169,840	8,971	178,811	192,296	8,310	187,121	200,606
October	13,673	173,867	8,796	182,663	196,336	8,225	190,888	204,561
November	13,304	180,819	8,744	189,563	202,867	9,005	198,568	211,872
December	12,994	197,969	8,959	206,928	219,922	8,875	215,803	228,797
Aggregate strength	171,966	2,121,709	113,966	2,235,675	2,407,641	105,931	2,341,606	2,513,572
Mean annual strength	14,330	176,809	9,497	186,306	200,636	8,828	195,134	209,464

[1] Source of information: Monthly reports of the sick and wounded from the office of the Surgeon General.

White troops served in the United States, Europe, Panama, Philippine Islands, Hawaii, and traveled on transports, while the colored (Negro) troops served only in the United States and in the Philippine Islands in sufficient numbers to justify separate consideration of them. There was a daily average number of 18 colored troops on transports and 31 in Hawaii, but in both instances this number is consolidated with the strength for the white troops. In the United States the number of white troops increased from 141,128 in January to 159,574 in December, while in Europe the number decreased from 16,831 to 14,668. For the colored troops, the number serving in the United States decreased from 8,712 in January to 7,382 in December; no colored troops served in Europe during the year.

TABLE 3.—*Strength of the United States Army serving in the United States and in Europe, by months, 1920.*

Months.	United States.					Europe.		
	Officers.	Enlisted white.	Enlisted colored.	Total enlisted.	Total officers and enlisted men.	Officers.	Total enlisted men, white.	Total officers and enlisted men.
January	13,234	141,128	8,712	149,840	163,074	878	16,831	17,709
February	12,809	145,311	8,783	154,094	166,903	870	17,230	18,100
March	12,626	142,447	8,813	151,260	163,886	847	16,860	17,707
April	12,721	137,348	8,724	146,072	158,793	822	15,897	16,719
May	12,672	135,086	8,151	143,237	155,909	790	15,423	16,213
June	12,357	131,340	7,975	139,315	151,672	776	15,137	15,913
July	12,169	131,480	5,874	137,354	149,523	738	14,540	15,278
August	12,317	133,316	6,993	140,309	152,626	731	13,696	14,427
September	11,483	133,590	7,343	140,933	152,416	734	13,632	14,366
October	11,561	136,543	7,189	143,732	155,293	714	14,173	14,887
November	11,201	142,673	7,233	149,906	161,107	715	14,543	15,258
December	11,025	159,574	7,382	166,956	177,981	662	14,668	15,330
Aggregatestrength	146,175	1,669,836	93,172	1,763,008	1,909,183	9,277	182,630	191,907
Mean annualstrength	12,181	139,153	7,764	146,917	159,098	773	15,219	15,992

The strength for white enlisted men is shown separately for the Philippine Islands and for China, although China is part of the Philippine Department. The average number of white enlisted men in the

Philippine Islands in January was 3,440 and in December 8,671; in China the number in January was 1,114 and in December 1,137; in Panama the strength increased from 3,615 in January to 5,466 in December; in Hawaii from 4,093 in January to 7,150 in December. The last troops were withdrawn from Siberia in March. In the Philippine Islands the strength for the colored troops decreased from 1,793 in January to 1,577 in December.

TABLE 4.—*Strength for white and colored enlisted men serving in countries other than the United States and Europe, by months, 1920.*

Months.	White enlisted men.						Colored enlisted men.
	Philippine Islands (excluding China).	China.	Panama.	Hawaii.	Transports.	Siberia.	Philippine Islands.
January	3,440	1,114	3,615	4,093	3,185	5,684	1,793
February	5,002	1,085	4,240	3,907	2,629	3,602	1,933
March	7,930	1,080	3,730	4,061	2,371	2,435	1,987
April	11,626	1,354	4,414	3,788	3,353	.....	1,924
May	11,297	1,183	4,355	4,389	2,017	.....	1,819
June	9,671	1,382	4,012	4,631	1,378	.....	1,730
July	10,144	1,404	4,218	4,390	1,885	.....	1,645
August	10,182	1,155	4,340	4,608	1,765	.....	1,640
September	9,701	1,482	4,612	5,281	1,542	.....	1,628
October	9,295	1,210	4,698	6,452	1,496	.....	1,607
November	9,137	1,210	5,413	7,069	774	.....	1,511
December	8,671	1,137	5,466	7,150	1,303	.....	1,577
Mean strength	8,841	1,233	4,426	4,985	1,975	977	1,733

The native Filipino troops decreased in numbers from 8,917 in January to 7,039 in December; the Porto Ricans increased from 1,517 in January to 1,836 in December. On December 5, 1920, the Forty-second Porto Rican Infantry left Porto Rico and arrived in Panama December 10 for station at Camp Gaillard. In Hawaii there was an average number of 24 oriental troops composed of Hawaiians, Chinese, and Japanese during the year, but this number has been included with the strength for the white troops in Hawaii.

TABLE 5.—*Strength, native troops, by months, 1920.*

Months.	Porto Ricans.			Filipinos.	Total native troops.
	Porto Rico.	Panama.	Total.		
January	1,512	5	1,517	8,917	10,434
February	1,515	5	1,520	8,665	10,185
March	1,468	5	1,473	7,670	9,143
April	1,486	5	1,491	6,877	8,368
May	1,494	5	1,499	7,045	8,544
June	1,483	6	1,489	6,967	8,456
July	1,441	4	1,445	6,859	8,304
August	1,402	4	1,406	6,676	8,082
September	1,333	6	1,339	6,971	8,310
October	1,476	6	1,482	6,743	8,225
November	1,892	6	1,898	7,107	9,005
December	1,287	549	1,836	7,039	8,875
Aggregate strength	17,789	606	18,395	87,536	105,931
Mean annual strength	1,482	51	1,533	7,295	8,828

The strength for the Army Nurse Corps, including the reserves in active service, was obtained from the monthly returns as of the first of each month, and that for the students in the Army School of Nursing from the returns as of the last of each month. The Army Nurse Corps, including the reserves, decreased from 2,332 in January to 1,137 in December, the average number for the year being 1,649. The students in the Army School of Nursing decreased from 594 in January to 533 in December, the mean annual number being 554.

TABLE 6.—*Strength of Army Nurse Corps, including reserves and students.*

Months.	Army Nurse Corps.[1]	Students.	Total.
January	2,332	594	2,926
February	2,193	581	2,774
March	2,028	575	2,603
April	1,973	572	2,545
May	1,742	557	2,299
June	1,617	553	2,170
July	1,527	545	2,072
August	1,475	537	2,012
September	1,352	529	1,881
October	1,229	538	1,767
November	1,183	537	1,720
December	1,137	533	1,670
Mean strength	1,649	554	2,203

[1] Includes Reserve Nurses on active duty.

INTERNATIONAL LIST OF CAUSES OF SICKNESS AND DEATHS.

The diagnostic terms used in the appendix statistical tables in the annual reports of this office were first grouped under the classification terms included in the International List of Causes of Sickness and Deaths in the report for 1913 (statistics 1912), although attempts had been made even prior to the Civil War to adopt a uniform classification which would make it possible to compare to vital statistics for the Army with those for the civilian population.

The classification as adopted at the Second Decennial Revision in 1909, which was held in Paris, France, was the one used in 1913. This list was not satisfactory in many respects, and beginning with the statistics for the year 1917, as published in the report of 1918, certain liberties were taken with the arrangement of it, which consisted largely of changes in the general groupings of the terms, the numbers and the terms themselves being retained unchanged. The changes made were practically those recommended by the committee on classification of the vital statistics section of the American Public Health Association, as published in the Public Health Report, September 28, 1917, pages 1557–1632 (Washington, Government Printing Office, 1917).

The Third Decennial Revision of the International List was adopted by the International Commission which met in Paris from October 11–14, 1920. The United States was represented by Dr. William H. Davis and Dr. William H. Guilfoy, Bureau of the Census; Dr. Haven Emmerson, vital statistics section of the American Public Health Association; Dr. Eugene Monaghan, city of New York; Dr. Hennann Biggs, State of New York; Mr. Geo. H. Van Buren, Metro-

politan Life Insurance Co.; Dr. Rupert Blue, United States Public Health Service, and Col. Henry A. Shaw, United States Army.

The commission adopted the majority of the changes, which had been recommended by the American committee of the American Public Health Association, and which as stated had been used in this office for the statistics for the years 1917, 1918, and 1919. Unfortunately, however, through some misunderstanding on the part of the executive secretary of the international commission, Dr. Jacques Bertillon, the list as first released was not in accord with the understanding of the American and English representatives of the one that had been adopted by the commission. However, as the result of the effects of English and American unofficial representatives, some modifications of the released list were obtained. A revised list was prepared and furnished to the representatives of the various countries. This one is in the main acceptable. It is far in advance of any that has previously been in use. It is used in this annual report, as it is understood that the United States Bureau of the Census will also use it in the "Mortality Statistics for 1920."

To provide certain necessary additional terms for morbidity, the international numbers have been subdivided by using small letters, such as a, b, etc. In certain instances where the international term had already been subdivided by the commission, as, for example, No. 25, other epidemic and endemic diseases, where it was necessary to introduce further subdivisions, one international subdivision has been further subdivided by introducing a second letter, as 25ca, 25cb, etc. In all instances, however, the subdivisions made in this office can be assembled to make up the international classification number and term.

Class III, diseases of the nervous system and of the organs of special sense, has been subdivided into "A, Nervous system;" and "B, Organs of special sense." In Class XIV, external causes, the general grouping "Accidental traumatisms," has been inserted, covering the numbers from 175 to 189, inclusive, with the individual terms and numbers shown under the general one.

It also seemed desirable to add a subclassification for certain additional diagnostic terms of important character of injuries not otherwise provided for. Since these cases were included under the headings provided for cause, and no international classification numbers could be provided for the diagnoses, office classification numbers were assigned to them.

THE GROUPING OF DISPOSITIONS, AND TIME LOST WITH CASES.

The statistics for the years prior to 1917, as published in the annual reports, were prepared by hand process, and the deaths, discharges for disability, and time lost were shown for the year or the month in which they occurred. This method has certain advantages, since it enabled a more ready comparison to be made with the death rates as published by the vital statistics section of the Bureau of Census, and by boards of health. It, however, had the disadvantage of preventing the calculation of accurate case mortality rates, percentages of discharges for disability, and of the time lost for each class of cases.

Beginning with the preparation of the statistics for the year 1917 the method of preparing statistics was changed, the hand process being discontinued and electrical sorting and tabulating machines installed. This change in the system made it feasible to charge to each case or class of cases the deaths, discharges for disability, and the time lost belonging to it. The statistics published for months in the reports for 1918, 1919, and 1920 were compiled in this manner. Due, however, to the inability to handle the large amount of material received during the war expeditiously enough to prepare all the necessary material for each annual report, it was impossible to show all of the dispositions and time lost during the first part of the succeeding year for cases which occurred during the latter part of the calendar year covered by the report. Such time and dispositions were, however, shown in the succeeding report, under the heading of deaths, discharges, or days lost for cases remaining from the preceding year. However, the large statistical tables in the appendix contained these data only for the calendar years, such deaths discharges, and days lost, being shown as actually occurred during the year.

In this report a radical change has been made. In the monthly tables, the dispositions and time lost are shown for the cases to which they belong. However, the appendix tables include all dispositions and "days lost" not previously shown in the appendix tables of reports in addition to these complete data for 1920 cases. Thus they include the dispositions and time lost for 1919 cases remaining into 1920, for 1920 cases in 1920, and in addition for 1920 cases remaining into 1921. This results in an abnormal number of deaths, discharges for disability, and time lost being shown in these appendix tables of this one report. It seemed, however, impossible to avoid this, if complete data was to be published in the yearly series of reports without any omissions. Subtotals have, however, been added showing the actual deaths, discharges for disability, and days lost for the 1920 cases only, and as far as practicable data for 1920 cases only have been used in the text tables. It is proposed in subsequent reports to show in the appendix tables only such of these data as belong to the year's cases. Thus, in the one for 1922, the admissions (cases) for 1921 will be shown, with the deaths, discharges for disability, and days lost for them without regard to when they occurred.

ADMISSIONS.

AMERICAN TROOPS.

Officers and enlisted men, United States Army. Diseases only.—The general admission rate for disease for the total United States Army, including all officers and enlisted men, both American and native troops for the year 1920, was 706.79 per 1,000. That for officers (407.12) was decidedly lower than that for white (753.47), and colored (518.58) enlisted men, or Porto Rican (956.29), but it was, however, higher than the one for the native Filipino troops (356.55).

All causes.—The admission rate for the total American Army for all causes, including diseases and injuries, was 830.69. Here again the rate for the officers (464.34) was lower than that for the colored

troops (624.72), for the white (886.37), and for the Porto Ricans (1,095.90), but was higher than that for the native Filipino troops (413.30).

Enlisted men in the United States. Diseases only.—For the enlisted men serving in the United States, the admission rate for diseases only was decidedly higher for the white troops than it was for the colored, it being 728.69 as compared with 506.96. An examination of Appendix Table VI shows that the excess in the admission rate for the white troops was caused to a large extent by the excess in the admission rate for the respiratory group of diseases. Combining the rates for tonsillitis, influenza, bronchitis, pharyngitis, and rhinitis, a rate of 256.95 is obtained for the white troops and only 134.48 for the colored, which shows an excess of 122.47 for the white over the colored. An examination of Table 1, "Enlistments, 1920, by months," shows also that during the early part of the year, when the 1920 influenza epidemic was in progress, there was a large number of white recruits enlisted, with comparatively few of the colored.

The decade table (Table 7) shows that the admission rate for the white enlisted men in 1920 was lower than that for any year during the World War or in 1916, but higher than that for any of the preceding years in the decade, that for 1911 being excepted. The same was also true of the rate for the colored troops.

External causes.—For injuries, the admission rate for the white enlisted men (132.13) was also higher than that for the colored (102.65). The whites had noticeably higher admission rates for simple contusions, and simple fractures (simple fractures; white, 14.01; colored, 5.41).

Enlisted men in Europe. Diseases only.—The only enlisted men of the United States Army serving in Europe during the year were white troops. The admission rate was 790.66 per 1,000, which was higher than the corresponding rate for the United States. This rate was much higher than the corresponding one for the white troops in Europe in 1919, when it was only 436.88. The increase in the admission rate for the respiratory group of diseases and for venereal diseases in 1920 was especially noticeable, the combined rate for influenza, bronchitis, acute tonsillitis, and rhinitis for 1920 being 254.03, as compared with 146.54 for 1919, or an excess of 107.49 for last year. The increase in the rate for venereal diseases was even more pronounced, the rate being 165.26 for 1920 and 44.42 for 1919, an increase of 120.84. Attention is invited to the discussion relative to the prevalence of venereal diseases among the American Forces in Germany from the report of the chief surgeon, under the subject of venereal diseases on page 77.

The most frequent causes of admission were bronchitis, gonococcus infection, tonsillitis acute, and influenza. During the early part of the year, the respiratory diseases were quite prevalent. Venereal diseases, which were also quite prevalent during the early part of the year, continued so throughout the year, with however, a noticeable decrease in the number of cases during the latter part of it.

External causes.—The admission rate for injuries produced by external causes was 151.19 per 1,000, which was higher than the corresponding rate in the United States. For simple fractures the rate

was 26.08 in Europe, and 14.01 for white troops in the United States. Among the specified causes automobile accidents were less frequent in Europe than in the United States, while motorcycle accidents were much more frequent, as were also accidents that occurred as the result of athletic exercises and brawls. In 1919 this admission rate was 41.96 for white troops in Europe. To at least a certain extent the great excess in 1920 was probably due to the large number of unseasoned recruits, and also to the excessive use of alcohol. The chief surgeon states on page 77 that "while soldiers are only authorized to drink light wines and beer the illicit traffic in brandy can not be prevented in a country which does not forbid the sale of alcohol in any form to its own people."

Enlisted men in the Philippine Islands. Diseases only.—The admission rate for white troops in the Philippine Islands (1,134.15) was higher than that for any year in the past decade, while, on the other hand, the rate for the colored troops there (570.69) was lower than any corresponding rate during the past decade. The excessive rate for the white troops was due to the unusual amount of dengue. There were 2,240 cases of this disease admitted, the rate being 253.37, while for the colored there were only 8 cases treated, with a rate of only 4.62. Table 31 shows the occurrence of this disease among American troops in the Philippine Islands during the past decade. It is interesting to note that the admission rate for the native Filipino troops for this disease (16.31) was also low. Another reason for the excess of the white race over the colored was the greater prevalence of venereal diseases among the white, it being 188.10, and only 160.41 for the colored.

External causes.—For injuries the admission rate for white troops was 113.90, as compared with 121.70 for the colored. This rate for the white troops was lower than the corresponding rate for the white troops in any other country where they were serving, with the exception of China.

Enlisted men in Hawaii. Diseases only.—The only enlisted men serving in Hawaii were white troops. The admission rate for them was slightly higher than it was in 1919, it being 590.97, as compared with 579.62. This was lower than those for 1917 and 1918, but higher than that for any other year preceding it since 1912. The leading cause of admission was bronchitis (58.38), followed, in order, by tonsillitis (39.72) and gonorrhea (37.51).

External causes.—For injuries the admission rate (174.72) was higher than that for white troops in any other country where they were serving, but even this was considerably lower than it had been in 1919, when it was 207.01. This rate for simple fractures (26.28) was higher than that for our white troops in any other country where they were serving. There were also proportionally more suicides, but no homicides. The rates for injuries from cutting and piercing instruments, from falls, and from athletic exercises were also excessive.

Enlisted men in Panama. Diseases only.—The only enlisted men serving in Panama during the year were white, until the month of December, when the Forty-second Porto Rican Infantry was sent there. The statistics for this regiment are combined with those for the Porto Ricans in Porto Rico.

The admission rate for diseases for the white troops was 703.34, which shows a very material increase over that for the preceding year, when it was only 584.48. Nearly one-half of the increase in the rate which amounted to 118.86 was due to the increase of venereal diseases, which amounted to 55.57.

External causes.—For injuries the rate was 154.32, which was higher than the corresponding rate for the white troops in any other country where they were serving, with the exception of Hawaii. This rate in 1919 was 137.57. The rate for falls (29.15) was excessively high, being higher in fact than that for white troops in any other countries. That for athletic exercises was 24.63, which was also higher than that for white troops in any other country with the exception of Hawaii.

Enlisted men in China. Disease only.—China, which is a part of the Philippine Department, is considered separately on account of the dissimilarity of the climate of that country and that of the Philippines. In the last three annual reports it had not been considered separately on account of the comparatively small number of troops stationed there, and of the necessity of utilizing the space for other countries where a greater number of our soldiers were stationed. The only enlisted men in China were white. The admission rate for diseases was 1,085.15, which was higher than the corresponding rate for either the white or colored troops in any country where our troops were serving during the year, with the exception of that for the white troops in the Philippine Islands (1,134.15). The rate for venereal disease (421.73) was far in excess of that for any other country. In other words, practically one man out of every two was treated for a venereal disease of some character during the year.

External causes.—The rate for injuries (66.50) for these troops was quite low. The rate for simple fractures (1.62) was especially low as compared with the maximum rate, which was for white troops in Hawaii (26.28).

TABLE 7.—*Diseases (all)—Admissions, white and negro enlisted men in various countries, 1911–1920, ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	733.57	1,027.62	808.84	818.63	587.79	.....
1912	605.02	1,025.08	680.69	651.66	415.59	1,484.83
1913	488.31	784.47	492.52	745.29	475.24	733.85
1914	500.66	764.18	400.03	834.83	439.28	668.26
1915	[1]569.25	834.27	448.06	719.10	444.85	1,158.84
1916	783.67	703.06	399.82	694.67	747.89	842.33
1917	882.54	799.53	606.46	720.26	1,064.41	1,030.54
1918	1,216.47	1,039.99	646.00	946.29	2,004.02	994.64
1919	763.02	832.56	579.62	584.48	950.81	811.69
1920	728.69	1,134.15	590.97	703.34	506.96	570.69

[1] Includes National Guard officers.

NATIVE TROOPS.

Philippine Scouts. Diseases only.—The admission rate (356.55) for the native Filipino troops was very low. For these troops the rate for malarial fevers was higher than that for the white troops

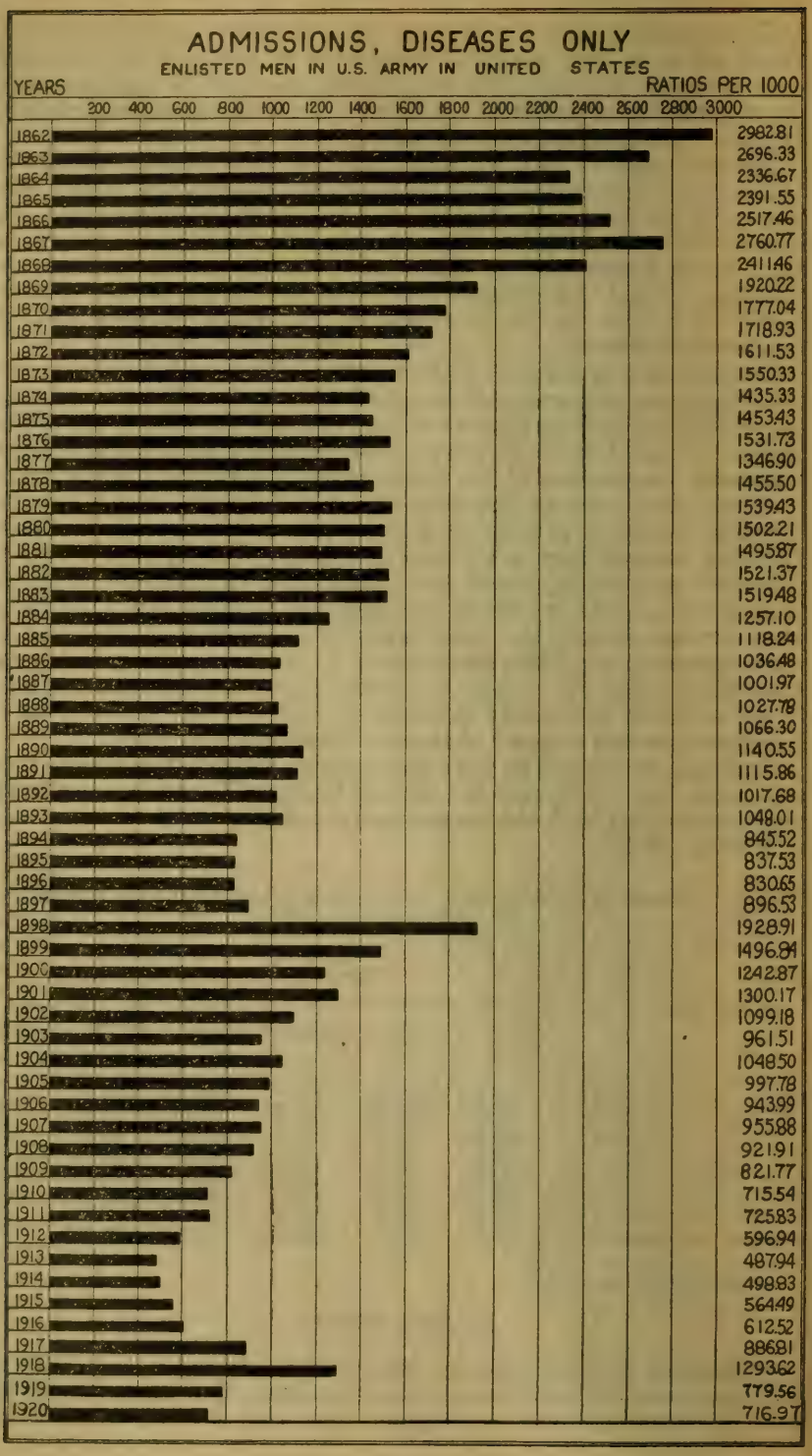
ADMISSIONS, DISEASES ONLY
ENLISTED MEN IN U.S. ARMY IN UNITED STATES
YEARS
RATIOS PER 1000
200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000
1862 2982.81
1863 2696.33
1864 2336.67
1865 2391.55
1866 2517.46
1867 2760.77
1868 2411.46
1869 1920.22
1870 1777.04
1871 1718.93
1872 1611.53
1873 1550.33
1874 1435.33
1875 1453.43
1876 1531.73
1877 1346.90
1878 1455.50
1879 1539.43
1880 1502.21
1881 1495.87
1882 1521.37
1883 1519.48
1884 1257.10
1885 1118.24
1886 1036.48
1887 1001.97
1888 1027.79
1889 1066.30
1890 1140.55
1891 1115.86
1892 1017.68
1893 1048.01
1894 845.52
1895 837.53
1896 830.65
1897 896.53
1898 1928.91
1899 1496.84
1900 1242.87
1901 1300.17
1902 1099.18
1903 961.51
1904 1048.50
1905 997.78
1906 943.99
1907 955.88
1908 921.91
1909 821.77
1910 715.54
1911 725.83
1912 596.94
1913 487.94
1914 498.83
1915 564.49
1916 612.52
1917 886.81
1918 1293.62
1919 779.56
1920 716.97

FIG. 1.

ADMISSIONS

OFFICERS AND ENLISTED MEN

LEADING DISEASES 1920

RATIOS PER 1000

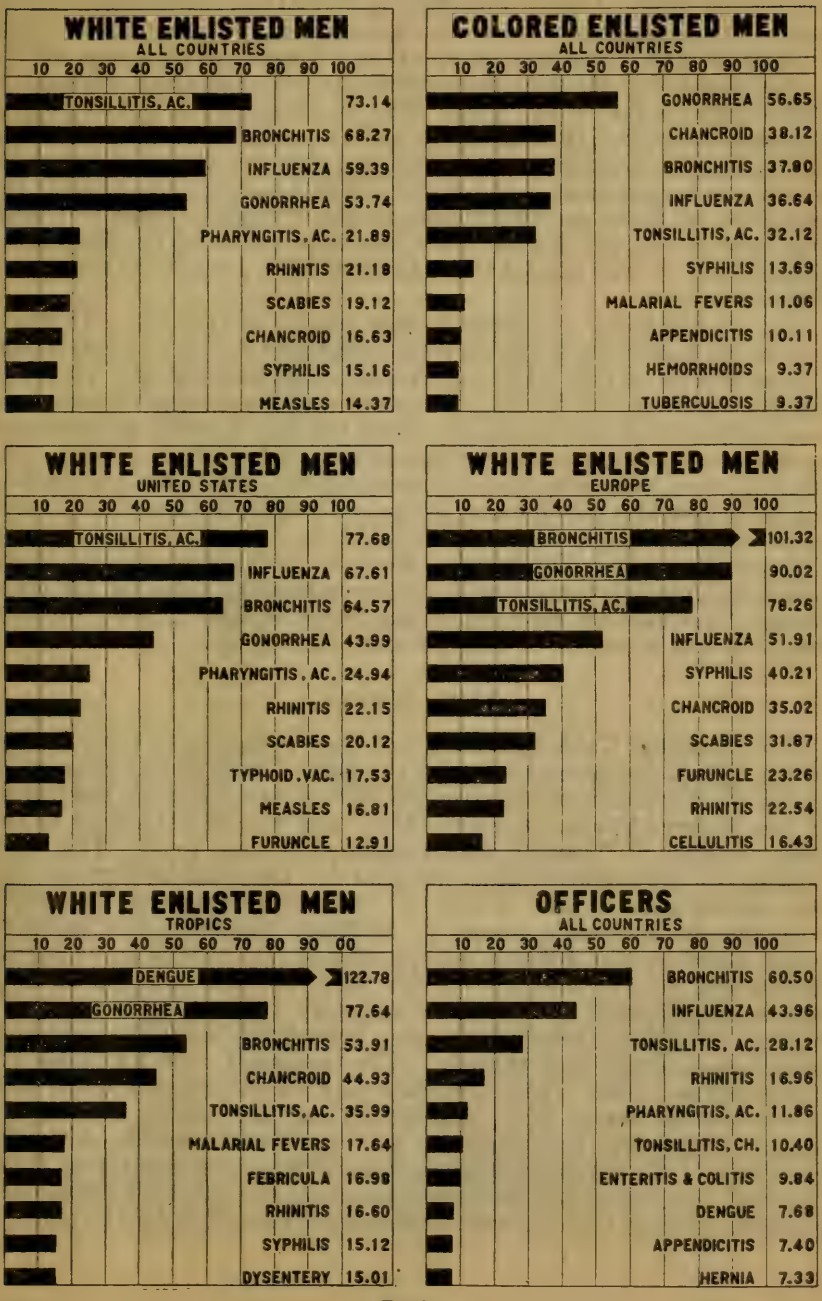

FIG. 2.

stationed in the Philippine Islands, but it was much lower than the one for the colored troops. As has always been true in the past years, the rate for venereal diseases for them was very low, it being only 20.29 as compared with 188.10 for the white troops and 160.41 for the colored troops stationed there.

External causes.—For injuries the rate was low, being only 56.75, which was lower than the corresponding rate for any other troops in the United States Army, other than that for those traveling on transports. There was no case of suicide, homicide, or drowning for them.

Porto Ricans. Diseases only.—Porto Rican native troops served in the Island of Porto Rico throughout the year, and the Forty-second Porto Rican Infantry left Porto Rico on December 5 and arrived in Panama December 10 for station at Camp Gaillard. The statistics for them are combined. The admission rate for disease was 956.29, which was higher than that for any white American troops with the exception of those for the whites in the Philippine Islands, China, and Siberia; it was higher than any rate recorded for the colored troops; and it was almost three times as high as that for the native Filipino troops.

The leading cause of admission was bronchitis (191.13). This rate was much higher than the corresponding rate for any troops in the United States Army, with the exception of that for the whites in Siberia, where it was 401.23. The second ranking cause of admission was enteritis and colitis (76.32), which was far in excess of the corresponding rates for any other troops in the United States Army. The third cause of admission was influenza (49.57), which was higher than the corresponding rate for any troops other than for the white troops in the United States, where it was 67.61.

External causes.—For injuries, the rate for these troops was 139.60, which compared favorably with the corresponding rates for the other troops. For injuries received as the result of falls (27.40), the rate for them was in excess of that for any other troops.

ARMY NURSES.

The Appendix Table No. XIII has been prepared to show for the Army Nurses the general rates for the year. As is stated on page 20 under the discussion of the strength for the Army Nurses, the nurses in the Reserve Corps, on active duty, and also the students in the Army School of Nursing were combined in one total. The total number of admissions during the year for the combined group was 946, which gave a rate of 429.41. This rate compared favorably with that for any male troops in the Army, the only ones below it, being those for the Filipino troops, 356.55, for troops traveling on transports, 405.06, and for officers, 407.12. The first six leading causes of admission were of the respiratory type, being in the order named: Tonsillitis, acute; influenza; bronchitis; tonsillitis; chronic; pharyngitis, acute; and rhinitis. The combined rate for these six diseases was 216.06. The combined rate for the white enlisted men in the United States Army was 265.43 and for officers 171.80. It appears then that for these six leading diseases, which, with the exception of the chronic tonsillitis, were of the acute respiratory type, the rate for the nurses and student nurses occupied an immediate position between that for white enlisted men and that for the officers.

DEATHS.

AMERICAN TROOPS.

General discussion.—As stated on page 22, the Appendix Tables VII to XIII, inclusive, show for the individual classification terms, the deaths that occurred for all cases admitted prior to 1920, which were under treatment during the year of 1920, those for cases admitted during 1920 that occurred during the year, and also those that occurred in 1921 for cases admitted in 1920. This results, as stated, in an excessive number of deaths being shown for the individual causes. In all previous reports only deaths that occurred during the calendar year were considered. However, two totals are shown for these appendix tables, one which shows the absolute numbers and the ratios for all deaths considered under the individual terms, and the other only such as occurred as the result of cases admitted during 1920. These latter figures are the ones to be compared with the rates for preceding and succeeding years. In the various text tables, as a rule, only the deaths for 1920 cases are shown. Any discrepancy that is discovered between the absolute numbers and the ratios for the individual classification terms in these appendix tables, and in the text tables for individual diseases, are to be explained on this basis.

Officers and enlisted men in the United States Army. Diseases only.—The total death rate for diseases only, for the total army, including officers and enlisted men, and native troops for 1920 cases only, was 3.42. Including the deaths that occurred during the year for cases admitted prior to 1920, the rate was 4.67. For officers, for 1920 cases only it was 3.98, which was higher than those for white enlisted men, Filipinos, and Porto Ricans, which were, respectively, 3.30, 1.65, and 1.30. It was, however, lower than that for the colored troops (6.42). The excess in the officers' rate was apparently due to the inability to change back deaths to the period to which they belonged on account of defective records. Proportionately more such deaths occurred for officers, since a proportionally greater number of war cases for them were remaining in the army hospitals at the beginning of the year 1920. Considering the rates, including deaths for cases admitted prior to 1920, that for officers was 5.72 as compared with 4.41 for the white enlisted men, 1.65 for the Filipino, 1.96 for the Porto Rican, and 10.74 for the colored. The explanation of the excess in the rate for officers over that for the enlisted men other than the colored is to be found in the higher rates for chronic conditions, such as tuberculosis, cancer, and other malignant tumors, and organic diseases of the heart.

External causes.—The death rate for injuries for the total army, for 1920 cases only, was 2.19, and including deaths for cases admitted prior to 1920, 2.24. For 1920 cases only, this rate for officers (2.79) was higher than that for either white, colored, or native enlisted men. The same was true also of the death rate including cases admitted prior to 1920. The explanation of this excessive rate for officers is to be found in the number of deaths that occurred as the result of balloon and aeroplane accidents. Twenty-one out of a total of 43 deaths that occurred in the United States Army from such accidents occurred among officers. The other 22 deaths occurred among white enlisted men. The rate for these accidents for officers was 1.47, and for white enlisted men 0.12 per 1,000.

Enlisted men in the United States. Diseases only.—Considering the 1920 cases, the death rate for white troops in the United States, was 3.21, as compared with 6.31 for the colored. Including deaths for cases admitted prior to 1920, the rate for white troops was 4.20 and for colored, 11.59. The explanation of the excessive rate for the colored troops is to be found in that for tuberculosis, this being 6.96 for the colored and 1.08 for the white, or an excess of 5.88. Excluding the death rates for tuberculosis, the rate for all deaths, including those for cases admitted prior to 1920, would be for white, 3.12, and for colored 4.63. The other classes of diseases where the colored rate was markedly in excess of that for the white were those for the diseases of the circulatory system and for those of the ear and mastoid process. Contrary to the usual experience, the death rate for white troops for all pneumonias, including that for pneumonia with influenza, exceeded that for the colored troops. This change was probably to be attributed to a large number of immature white recruits taken into the military service during the year, with the excessive prevalence among them of respiratory diseases during the 1919–1920 influenza epidemic.

External causes.—Considering 1920 cases only, the rate for deaths that occurred as the result of injuries in the United States was 1.93 for the white and 1.16 for the colored. Including deaths for cases admitted prior to, but which occurred in 1920, the rate for the whites was 1.97 and for the colored 1.16. For the latter figures, the apparent reason for the excess of the white rate is to be found in the excess of the white rates for practically all causes, other than those from firearms, homicides, and athletic exercises. There was no case of suicide reported for the colored troops, but 38 cases were reported for the white troops. There were 39 cases of drowning reported for the white troops and only 1 for the colored. On the other hand, the proportional number for the homicides was greater for the colored than for the white, there being two and five cases, respectively, with rates of 0.26 and 0.04 per 1,000. Little difference was apparent in the death rates for fractures.

Enlisted men in Europe. Diseases only.—For the white enlisted men in Europe for 1920 cases only, for disease, the death rate was 4.40, but including cases admitted prior to 1920 the death rate was 7.42. This latter rate was higher than that for white troops in any other country with the exception of China and Siberia. As it is explained elsewhere, all deaths that ultimately occurred as the result of disease contracted or first brought under observation in Europe, or in any other country, were, as far as practicable, charged to that country. The leading cause of deaths in the order named were: Tuberculosis, influenza, measles, and the two pneumonias. The rates for all of these diseases were higher than the corresponding rates for white troops in any country other than for those in China and Siberia.

External causes.—For 1920 cases only, the death rate for injuries was 4.34 and including the deaths for cases admitted prior to 1920 4.47. This rate exceeded that for white enlisted men in any other country with the exception of that for those in Siberia. Among other causes, there were 9 deaths from suicides, 6 from drowning, 4 as the result of homicides, 14 from firearms, and 5 from motor-cycle accidents.

Enlisted men in the Philippine Islands. Diseases only.—Considering the 1920 cases only the death rates for white troops in the Philip-

pine Islands was 2.38 as compared with 6.92 for the colored, and 1.65 for the Filipino native troops. There were no deaths in 1920 for cases admitted prior to 1920, and consequently there is no second set of rates to consider. This rate for the white troops was lower than the corresponding rate for the white troops in any other country where they were serving, with the exception of Panama, where it was 1.13. That for the colored troops was higher than the rate for 1919. For tuberculosis for colored rate was much in excess of that for the white, being 2.89 as compared with 0.45 per 1,000. There were few deaths charged to infectious diseases for either white or colored; for white troops there was one death for diphtheria, one for dengue, and six deaths from pneumonia, with also two for the colored.

External causes.—For 1920 cases only, this rate for the white enlisted men was 2.71, and for the colored troops 3.46. Including deaths for cases admitted prior to 1920 for the white troops it was 2.83 and for the colored 3.46. This latter rate for the whites was higher than the corresponding rate in any country where they were serving, with the exceptoin of Panama and Siberia, where it was 3.84 and 9.21, respectively. For the colored it was much higher than the corresponding rate in the United States, where it was 1.97. The excess of the colored rate over that for the white is to be principally found in the deaths that occurred as the result of accidental discharge of firearms, railroad accidents, and brawls.

Enlisted men in Hawaii. Diseases only.—For the white enlisted men who were serving in Hawaii, the death rate for 1920 cases only was very low, being only 1.00, and including cases admitted prior to 1920, 1.40. The rate for 1920 cases only was lower than that for our troops in any country where they were serving, but including deaths that occurred in cases admitted prior to 1920 it was higher than that for white troops in Panama (1.13). One death occurred as the result of influenza, two from tuberculosis, two from broncho-pneumonia, one from each of two other causes.

External causes.—This rate for 1920 cases only was 1.81. No death occurred from cases admitted prior to 1920. This rate was lower than the corresponding rate for our men in any other country other than in China, where it was 1.62 per 1,000. As will be noted, however, this rate for injuries was higher than that for diseases, the total number of deaths from external causes being nine. Of this number three occurred as the result of suicides, three as the result of accidental discharge of firearms, two from automobile accidents, and one from animals.

Enlisted men in Panama. Diseases only.—For white enlisted men serving in Panama for 1920 cases only, the death rate was 1.13. There were no deaths for cases admitted prior to 1920. The total number of deaths was only five; one from malaria fever, one from influenza, one from tuberculosis, one from cardiac hypertrophy, and one from broncho-pneumonia.

External causes.—On the contrary, the death rate for external causes was high, it being 3.84 for 1920 cases only. There were no deaths for cases admitted prior to 1920. This rate was higher than the corresponding rate for any troops in the United States Army other than that for white troops in Siberia, which was 9.21. Among other causes there were two suicidal deaths, four occurred as the result of

drowning, one from homicide, three as the result of accidental traumatism by firearms, and two from falls.

Enlisted men in China. Diseases only.—For the white enlisted men in China, the death rate was higher than the corresponding rate for white troops in any other country where they were serving, with the exception of Siberia, the rate being 8.11 for troops in China and 18.42 in Siberia. The total number of deaths that occurred in China was 10; 1 from scarlet fever, 2 from tuberculosis, 2 from myocarditis, 3 from pneumonias, 1 from intestinal parasites, and 1 from appendicitis.

External causes.—The death rate for injuries for white troops in China was low, it being only 1.62. This was the lowest death rate recorded during the year for white enlisted men in any country, transports not being considered. There was one death from drowning and two from accidental traumatisms.

TABLE 8.—*Diseases (all)—Deaths, white and negro enlisted men in various countries, 1911–1920, ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	2.78	1.93	0.99	.....	3.75	.....
1912	2.25	2.73	.89	1.29	2.81	5.18
1913	2.63	2.09	1.54	1.25	2.36	4.97
1914	2.42	2.08	.16	.48	6.02	1.60
1915	2.94	1.04	1.85	1.18	4.10	5.22
1916	[1] 2.33	2.63	1.65	1.57	8.44	4.23
1917	5.17	2.24	1.40	.99	12.32	3.32
1918	20.45	4.74	.89	3.02	38.72	2.98
1919	7.26	3.61	2.23	1.40	19.60	2.60
1920 [2]	3.21	2.38	1.00	1.13	6.31	6.92

[1] Includes National Guard officers.
[2] Does not include deaths for cases admitted prior to 1920, but does include those for 1920 cases remaining into 1921.

NATIVE TROOPS.

Philippine Scouts. Diseases only.—Only 12 deaths occurred among these troops for 1920 cases, with a rate of 1.65. There were no deaths from cases admitted prior to 1920. This was lower than the rate for white, colored, or Porto Rican troops, if deaths for cases admitted prior to 1920 are included, but higher than that for Porto Ricans (1.30) if 1920 cases only are considered. There were 3 deaths each from tuberculosis and cardiac hypertrophy, 2 from broncho-pneumonia, and 1 each from influenza, cancer, beriberi, and appendicitis.

External causes.—Only one death occurred among these troops as the result of external causes, which gives a very low rate of 0.14. This is far below any corresponding rate recorded for any other of the color troops.

Porto Rican troops. Diseases only.—For 1920 cases only, the death rate for diseases only, for native Porto Ricans was 1.30 and including the deaths for cases admitted prior to 1920, 1.96. Both rates were very low. The total number of deaths for 1920 cases was two, with one for cases admitted prior to 1920.

External causes.—A greater number of deaths occurred among these troops as the result of violence than as the result of diseases, the

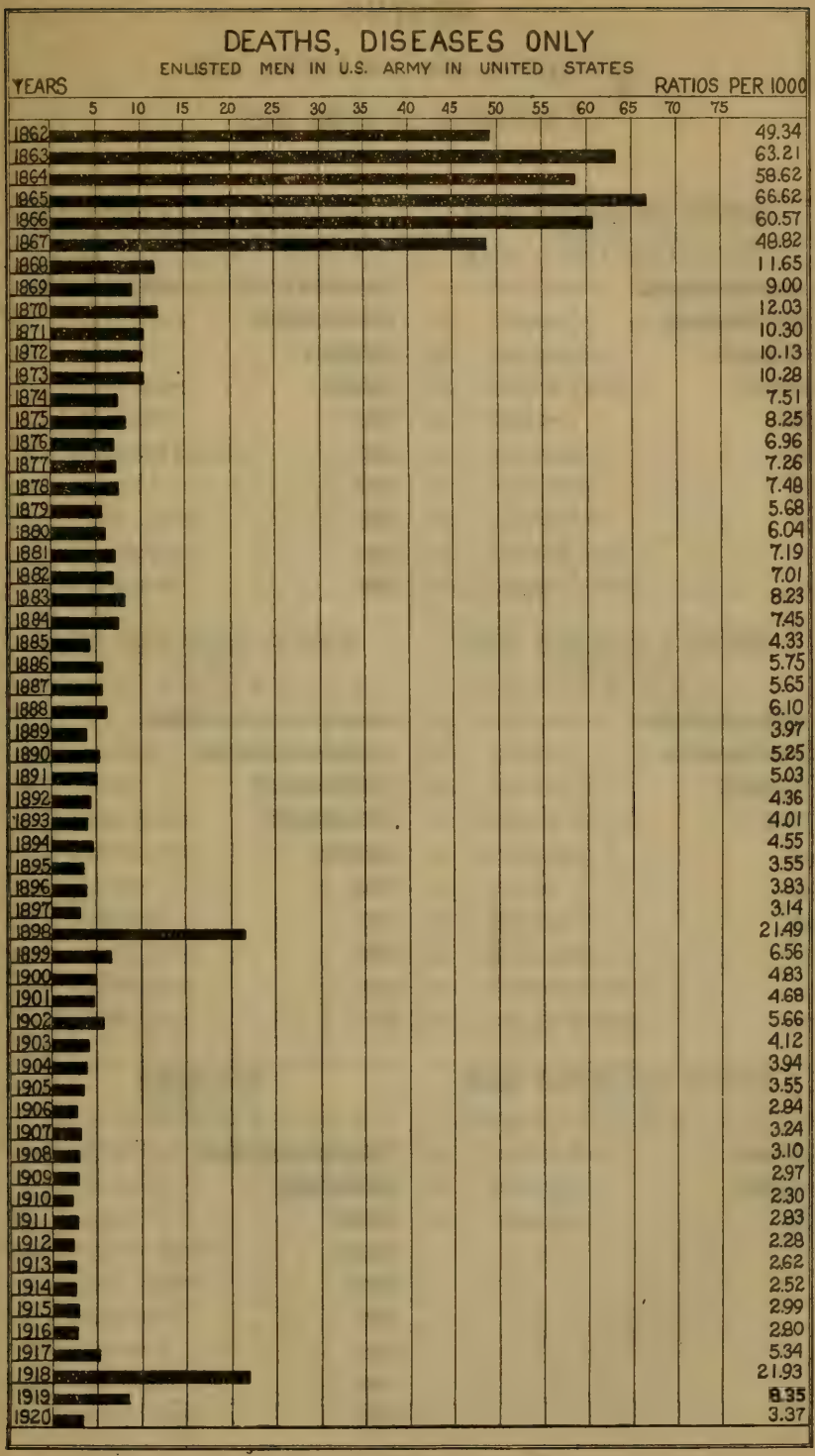
DEATHS, DISEASES ONLY
ENLISTED MEN IN U.S. ARMY IN UNITED STATES
YEARS
RATIOS PER 1000
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
1862 49.34
1863 63.21
1864 58.62
1865 66.62
1866 60.57
1867 48.82
1868 11.65
1869 9.00
1870 12.03
1871 10.30
1872 10.13
1873 10.28
1874 7.51
1875 8.25
1876 6.96
1877 7.26
1878 7.48
1879 5.68
1880 6.04
1881 7.19
1882 7.01
1883 8.23
1884 7.45
1885 4.33
1886 5.75
1887 5.65
1888 6.10
1889 3.97
1890 5.25
1891 5.03
1892 4.36
1893 4.01
1894 4.55
1895 3.55
1896 3.83
1897 3.14
1898 21.49
1899 6.56
1900 4.83
1901 4.68
1902 5.66
1903 4.12
1904 3.94
1905 3.55
1906 2.84
1907 3.24
1908 3.10
1909 2.97
1910 2.30
1911 2.83
1912 2.28
1913 2.62
1914 2.52
1915 2.99
1916 2.80
1917 5.34
1918 21.93
1919 8.35
1920 3.37

FIG. 3.

DEATHS

OFFICERS AND ENLISTED MEN

LEADING DISEASES 1920

RATIOS PER 1000

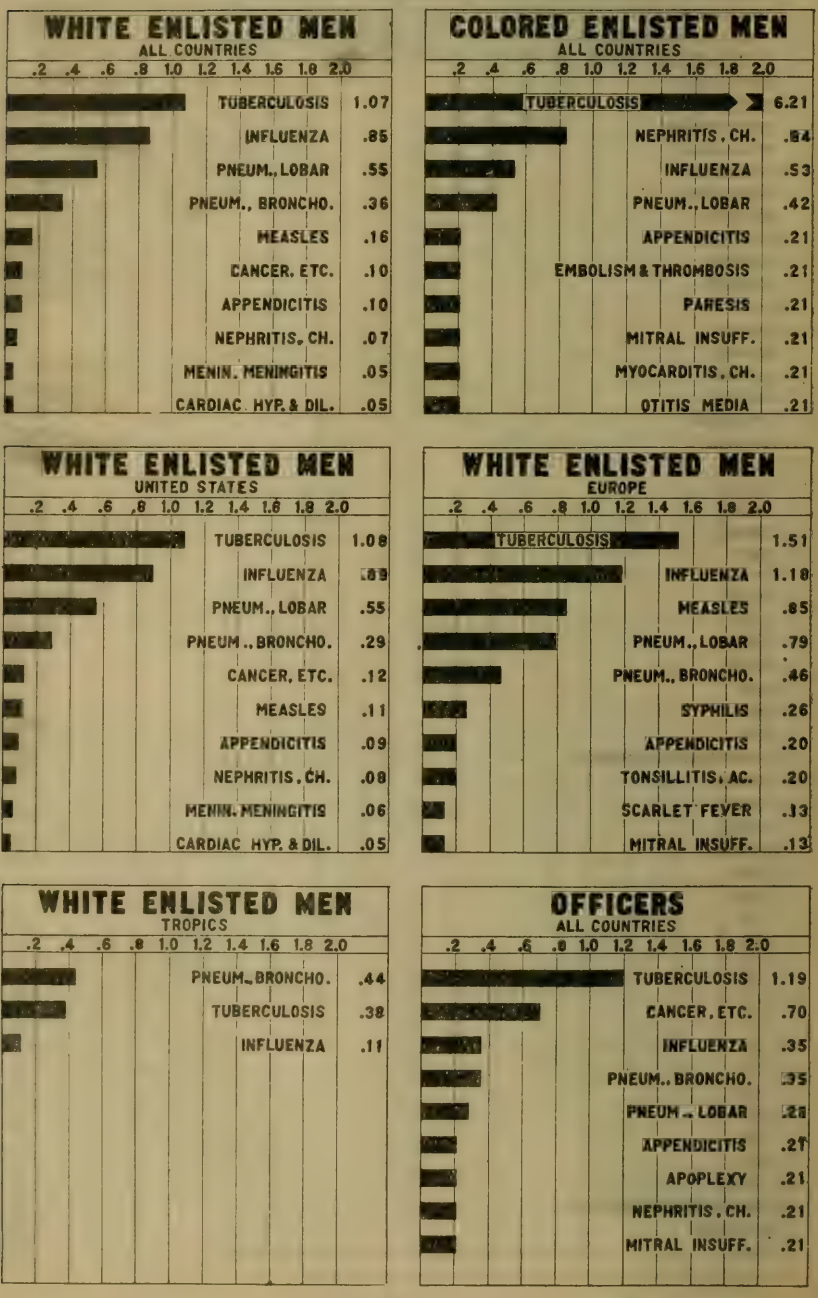

FIG. 4.

actual number from violence being four, and as stated above from disease, three. The rate for these cases, however, corresponded favorably with the corresponding rate for any other of the color troops with the exception of that for the native Filipino.

ARMY NURSES.

The total number of deaths that occurred among nurses during the year amounted to three, but excluding deaths for cases admitted prior to 1920 there were only two. The death rate including all cases was 1.36. This rate was lower than that for officers or for any color of enlisted men.

DISCHARGES FOR DISABILITY.

AMERICAN TROOPS.

General discussion.—The remarks in paragraph 1 page 29 relative to the inclusion in the tables of the deaths for 1920 cases and for cases admitted prior to 1920 apply also to discharges for disability.

Officers and enlisted men, United States Army. Diseases only.—For the total Army, including officers and enlisted men, both American and native troops, for 1920 cases only, the discharge rate was 21.61, but including cases admitted prior to 1920, it was 43.10. For discharges for 1920 cases only, the rate for officers was higher than that for enlisted men of any color, with the exception of the native Porto Rican troops. For officers, the rate was 22.96, as compared with 20.24 for white enlisted men, 14.00 for colored enlisted men, 13.16 for Filipino native troops, and 23.48 for Porto Rican troops. Table 9, which gives the rates for the discharges for disability for diseases for each year of the past decade, shows that for the white enlisted men, the rate for them for 1920 was higher in the United States than that for any other year in the decade, with the exception of those for the three years of the war Army, 1917, 1918, and 1919, and that those for troops in the Philippine Islands and Hawaiian Islands were higher than those for any year in the past decade, with the exception of the ones for troops in Hawaii in 1912 and 1919. Probably the reason for this excessive discharge rate for these white troops was the enlistment during the year of a large number of immature and physically defective recruits. Extracts from the reports of the corps areas and department surgeons relative to the unsatisfactory character of recruits are on page 179. This conclusion is further borne out by the fact that for the negro troops, for whom there were comparatively few enlistments, the discharge rate was lower in the United States than it has been for any year since 1913.

Considering now the discharge rate, including cases of discharge that occurred as the result of cases admitted prior to 1920, it appears that the one for officers was higher than that for the enlisted men of any color, it being 49.27 for officers, 43.75 for white troops, 46.12 for colored, 25.44 for native Porto Ricans, and 14.94 for native Filipino troops. This excessive rate for officers was due to a great extent to the high rate from tuberculosis, which was 24.49. For the colored troops, however, the discharge rate for tuberculosis was 24.96. This high rate for officers is not to be interpreted to mean

that a greater number of officers than of enlisted men contracted tuberculosis during the year, but it was caused by the retention in hospital of a large number of cases from the war Army until they attained the maximum degree of improvement. Many such cases were discharged during the year. This same reason no doubt explains the excess for the discharges for 1920 cases only, for as in the case of deaths (see page 29) a number of cases of discharges were charged to the year 1920, through inability to connect the case with the original time and place of admission.

External causes.—For 1920 cases only, the discharge rate for injuries other than battle was lower for officers than for any class of enlisted men other than the native Filipino troops, it being 1.26 for officers, 1.67 for white enlisted men, 2.74 for colored, 1.96 for native Porto Rican troops, and 0.69 per 1,000 for native Filipino troops. Including the discharges for cases admitted prior to 1920, the rate for officers was higher than that for enlisted men of any color, it being 8.79 for officers, 6.82 for white enlisted men, 2.84 for negroes, 1.96 for native Porto Ricans, and 0.82 for native Filipino troops. Here again it was an excessive number of cases of emergency officers who were held or remained in hospital to attain the maximum degree of improvement, and were discharged in 1920, that caused the excessive rate for them.

Since the compensation received by enlisted men after discharge as beneficiaries of the War Risk Insurance Bureau exceeded the amount received as pay while in the military service, the majority of them elected to take their discharge for disability as soon as practicable, while on the other hand, as the pay of officers while in the military service exceeded the compensation received as beneficiaries of the War Risk Insurance Bureau, they naturally elected to remain in the military service until the maximum degree of improvement was attained. These facts resulted in larger proportional number of officers being discharged late; that is, in 1920.

Enlisted men in the United States. Diseases only.—Considering the discharges for disability for 1920 cases only, the rate for white enlisted men (24.24) was much higher than that for the colored enlisted men (15.71). On the other hand, the rate for discharges for disability, including cases admitted prior to 1920, was higher for the colored (54.87) than for the white (47.63). A considerable part of the excess in the latter rate for the colored troops was due to the excessive number of discharges for tuberculosis, the rate being 30.14 as compared with 16.37 for the white. The rate for discharges for venereal diseases was also higher for the colored, while that for the majority of the nervous and mental diseases, was higher for the white troops.

External causes.—The rates for discharges for disability that occurred as the result of injuries for 1920 cases only was much lower for the white troops than for the colored, it being 1.82 for the white and 3.22 for the colored. Including discharges for cases admitted prior to 1920, the rate for white was larger than that for the colored, being 4.43 as compared with 3.22.

Enlisted men in Europe. Diseases only.—For the white enlisted men in Europe the rate for discharges for disability for 1920 cases only was 11.04, but including discharges for cases admitted prior to 1920, it was 40.87. This combined rate was lower than that for the

white troops in the United States, but higher than those for the white troops in the other countries, while the rate for 1920 cases only, was lower than that for the white troops in any other country, with the exception of China and Siberia. The excess in the combined rate was apparently due to the relatively large number of cases of disability from the war Army from Europe, which was not discharged until 1920. The total number of discharges for disability, including cases admitted prior to 1920, was 622; of this number 154 were for tuberculosis alone. Of the 622 cases only 168 were for cases admitted during 1920.

External causes.—The discharge rate for injuries for 1920 cases only was 1.25, which was about an average of those for white troops in other countries. Including cases admitted prior to 1920, it was quite high (35.74). The total number of discharges for this cause, for which the attempt was made to exclude injuries received in battle, was 544, and of this number only 19 were for cases admitted during 1920. The other discharges were for cases from the war Army, held and not discharged until 1920.

Enlisted men in the Philippine Islands. Diseases only.—Considering the 1920 cases only, the discharge rate for white troops in the Philippine Islands was 25.34, and for the colored, 6.35. The excess in the white rate, as was pointed out above, was apparently due to the excessive number of recruits of immature age, with physical disability, who were enlisted during the latter part of 1919 and 1920. Including discharges for cases admitted prior to 1920, the rate for white troops was 27.82, and for colored 6.92. This latter rate for the white troops was higher than the corresponding rate for these troops in any country other than the United States and Europe. For these troops, the discharge rate for the diseases of the nervous system was 9.84, for the colored 1.74; for diseases of the organs of special sense it was for the white, 3.39, and for the colored, 2.89; for diseases of the circulatory system, for the white 4.99, while for the colored there were no discharges for this cause. The white rate exceeded that for the colored for practically all causes, even including tuberculosis, due not to racial differences, but as stated, to the character of white recruits enlisted.

External causes.—The rates for discharges for disability that occurred as the result of injuries for the 1920 cases only, for the white troops in the Philippine Islands was 0.90, and for the colored 0.58 per 1,000. These rates were low. Including discharges for cases admitted prior to 1920, the rate for white troops was 1.13, and for the colored troops 1.15. These rates were the lowest recorded for the year, with the exception of the ones for white troops in China (0.81), and for the native Filipino troops (0.82).

Enlisted men in Hawaii. Diseases only.—The rates for discharges for disability for 1920 cases only was 15.24, and including those for cases admitted prior to 1920, 18.66. This was lower than the one for white troops in the United States, Europe, and Philippine Islands, but higher than those for troops in Panama and China. The actual number of discharges shown, was 93, 76 of which were for cases admitted in 1920. Of the 93, 3 were for tuberculosis and 33 for diseases of the nervous system.

External causes.—For injury cases the rate for 1920 cases only was 1.60, and including cases admitted prior to 1920, 2.41. For

1920 cases only, this rate was in excess of that for white troops in all countries other than those for troops in the United States and Siberia. Including cases admitted prior to 1920, it was also lower than that for Europe. The total number of discharges for external causes was 12, 8 of which were for 1920 cases.

Enlisted men in Panama. Diseases only.—This rate for white enlisted men in Panama for diseases for 1920 cases only was 12.43, and including discharges for cases admitted prior to 1920, it was 14.46. The rate for the 1920 cases only was lower than that for the white troops in the United States, Philippine Islands, and Hawaiian Islands, but higher than that for the troops in Europe, China, and Siberia. Including discharges for 1920 cases, it was lower also for the troops in Europe. The total number of discharges was 64, 55 of which occurred for 1920 cases. Of the total number, 30 occurred as the result of diseases of the nervous system.

External causes.—Including 1920 cases only, the rate for discharges that occurred as the result of injuries was 0.68. This was the lowest rate that was recorded for the year, with the exception of that for the negro troops in the Philippine Islands (0.58) and that for the white troops in China where no discharges occurred. Including discharges for cases admitted prior to 1920 it was 1.36, which was lower than any similar rate other than those for the white, colored, and native troops in the Philippine Islands, and for the white troops in China. The actual number of discharges for external causes was six, three of which were for cases admitted prior to 1920.

Enlisted men in China. Diseases only.—For the white American troops in China the discharge rate for diseases, 1920 cases only, was very low, being only 4.87. This was lower than any other corresponding rate recorded for the year. Including discharges for cases admitted prior to 1920, the rate was 6.49, which was also lower than the corresponding rate for any other American troops recorded for the year. There were only eight discharges, six of which were for cases admitted during 1920. There were no two discharges for any one cause, other than for pes planus.

External causes.—There were no discharges for injury cases admitted during 1920 and only one for a case admitted prior to 1920.

TABLE 9.—*Diseases (all)—Discharges, white and negro enlisted men in various countries, 1911–1920, ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	13.29	10.52	13.41	.....	12.62	.....
1912	13.44	8.81	16.29	15.52	7.64	4.44
1913	11.94	13.27	9.21	36.39	11.20	14.36
1914	12.49	10.84	8.30	9.04	24.07	7.45
1915	11.64	22.47	10.82	12.01	19.27	18.64
1916	[1] 14.32	13.92	13.80	16.36	26.54	4.23
1917	28.11	8.53	13.96	7.77	41.75	3.98
1918	62.42	4.38	7.81	5.19	175.12	.60
1919	77.69	8.76	18.47	7.80	76.49	7.14
1920 [2]	24.24	25.34	15.24	12.43	15.71	6.35

[1] Includes National Guard officers.
[2] Does not include discharges for cases admitted prior to 1920, but does include those for 1920 cases remaining into 1921.

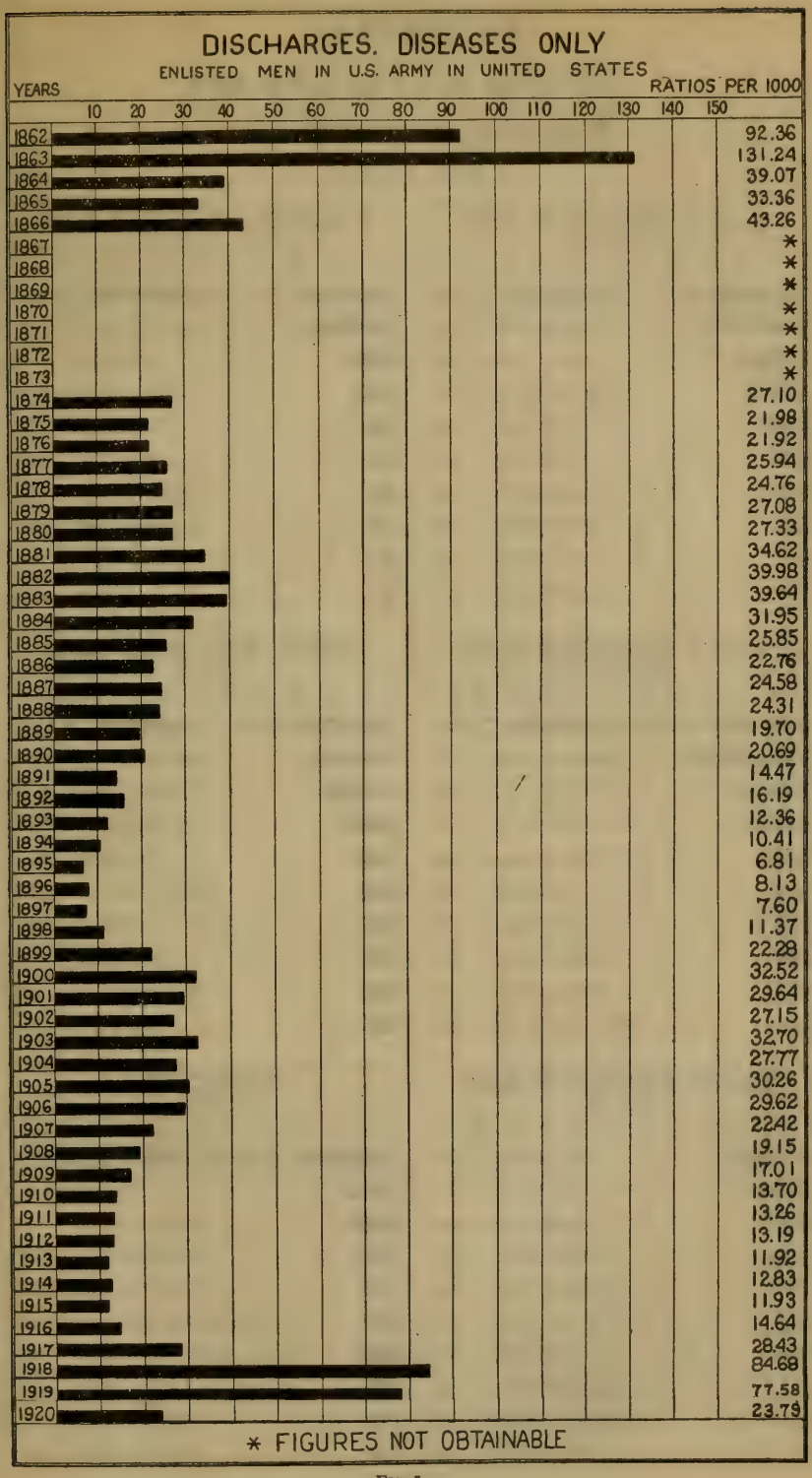
DISCHARGES. DISEASES ONLY
ENLISTED MEN IN U.S. ARMY IN UNITED STATES
YEARS
RATIOS PER 1000
10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
1862 92.36
1863 131.24
1864 39.07
1865 33.36
1866 43.26
1867 *
1868 *
1869 *
1870 *
1871 *
1872 *
1873 *
1874 27.10
1875 21.98
1876 21.92
1877 25.94
1878 24.76
1879 27.08
1880 27.33
1881 34.62
1882 39.98
1883 39.64
1884 31.95
1885 25.85
1886 22.76
1887 24.58
1888 24.31
1889 19.70
1890 20.69
1891 14.47
1892 16.19
1893 12.36
1894 10.41
1895 6.81
1896 8.13
1897 7.60
1898 11.37
1899 22.28
1900 32.52
1901 29.64
1902 27.15
1903 32.70
1904 27.77
1905 30.26
1906 29.62
1907 22.42
1908 19.15
1909 17.01
1910 13.70
1911 13.26
1912 13.19
1913 11.92
1914 12.83
1915 11.93
1916 14.64
1917 28.43
1918 84.68
1919 77.58
1920 23.79
* FIGURES NOT OBTAINABLE

FIG. 5.

DISCHARGES

OFFICERS AND ENLISTED MEN

LEADING DISEASES 1920

RATIOS PER 1000

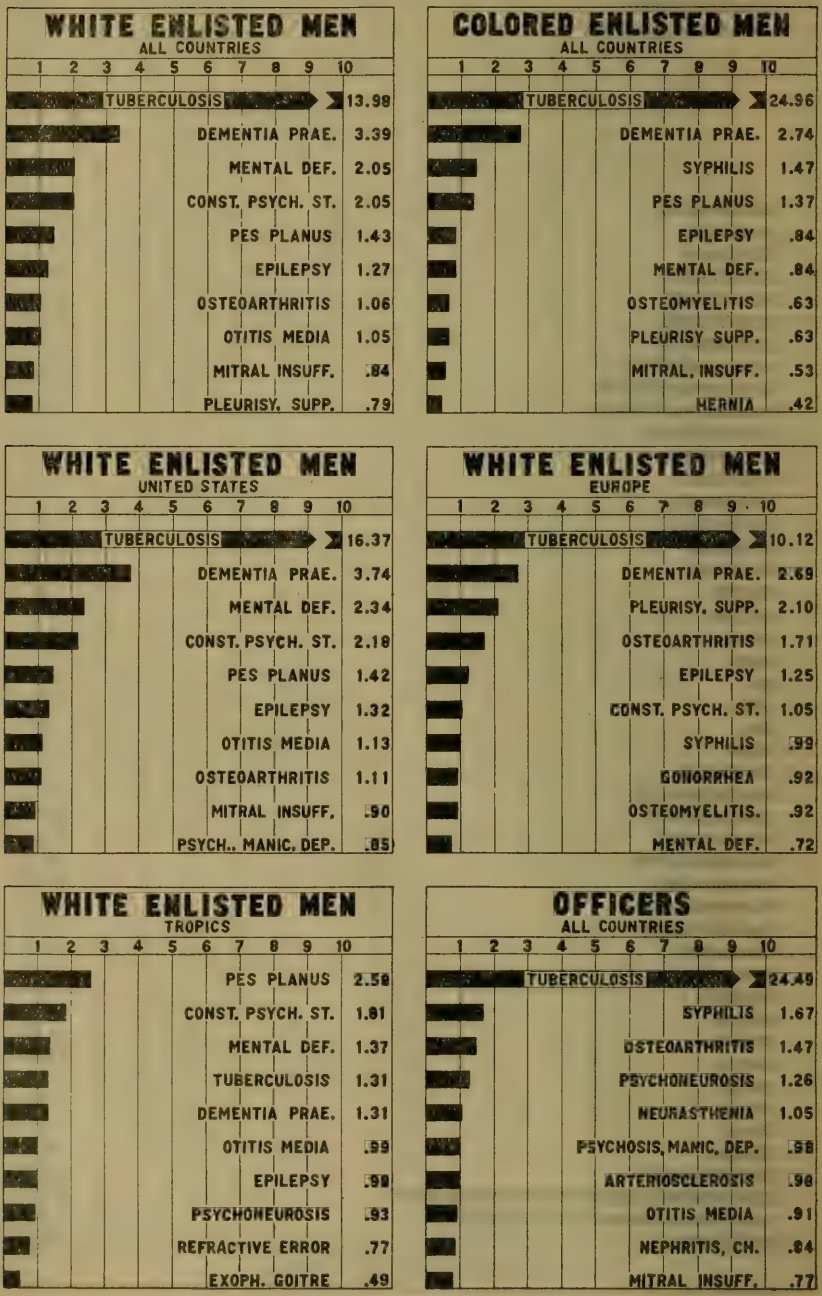

FIG. 6.

NATIVE TROOPS.

Philippine Scouts. Diseases only.—This rate for the Philippine native troops for cases admitted during 1920 was 13.16, which was lower than the corresponding rate for white, colored, and Porto Rican native troops. Including the discharges for cases admitted prior to 1920, it was 14.94, which was also lower than those for the other color races. The actual number of discharges amounted to 109, 96 of which were for cases admitted during 1920. Of the 109 cases 74 were for discharges for tuberculosis. Attention is invited to the remarks of the chief surgeon of the Philippine Department, page 195, relative to the necessity of a more careful physical examination of the recruits for the Philippine Scouts prior to enlistments, to exclude cases of this disease.

External causes.—Five soldiers were discharged for injuries received as the result of external causes for 1920 cases and one for a case admitted prior to 1920. The rate for discharges for 1920 cases was 0.69, and for all cases of discharges, including those for cases admitted prior to 1920, it was 0.82. These rates were both lower than the corresponding rates for the other color races.

Porto Rican native troops. Diseases only.—The rate for these troops for 1920 cases only was 23.48, which was higher than the corresponding rate for any of the other color races. Including discharges for cases admitted prior to 1920, it was 25.44, which was higher than the rate for the Filipino troops, but lower than that for the white and negro troops, due to the number of discharges that occurred during the year for these troops, for cases admitted prior to the year, from the war Army. The actual number of discharges was 39, 36 of which were for cases admitted during the year. Seven of the 39 cases were for tuberculosis, 5 for syphilis, and 11 for neuritis (apparently beriberi).

External causes.—The total number of men discharged for injuries received as the result of external causes was 3. These were all for cases admitted during 1920. The rate was 1.96, which was higher than the corresponding rate for the Filipino troops but lower than that for the colored.

ARMY NURSES.

The total number discharged for 1920 cases only was 7. Including discharges for cases admitted prior to 1920, the number was 23, 12 of which were for tuberculosis. For 1920 cases only the annual discharge rate was 3.18 per 1,000. This was much lower than the corresponding rate for officers or for any color of enlisted men.

DAYS LOST OR NONEFFECTIVE RATE.

AMERICAN TROOPS.

Officers and enlisted men, United States Army. Diseases only.—The remarks on page 29 in the discussion on deaths, in regard to the inclusion of the data for cases admitted prior to 1920 and during 1920, apply also to the days lost as shown in the AppendixTables IX and X. The inclusion of the days lost for cases admitted prior to 1920 makes

a very material difference; the total days lost for 1920 cases only amounted to 2,466,998, but including the days for cases admitted prior to 1920 the loss of time amounted to 3,276,311. The noneffective rate for the first total was 32.18 and for the second 42.73.

For 1920 cases only the noneffective rate for officers (26.36) was lower than that for white enlisted men (33.65), colored enlisted men (28.09), or Porto Rican native troops (34.16), but higher than that for the Filipino native troops (12.96). Including days for cases admitted prior to 1920, the noneffective rate for officers (43.21) was lower than that for white enlisted men (44.06), but higher than that for colored enlisted men (40.60), Porto Rican native troops (35.95), or Filipino native troops (13.92). As stated under the discussion for discharges and deaths, it was the retention of a proportionally larger number of officers in hospital for treatment that caused the comparatively high noneffective rate.

External causes.—The total number of days lost as the result of injuries received from external causes for 1920 cases only was 489,262. Including days lost for cases admitted prior to 1920, the time amounted to 575,819 days. Considering the days lost for 1920 cases only, the noneffective rate for officers (5.88) was lower than that for white enlisted men (6.69), but higher than that for colored (4.93), Porto Rican native troops (5.41), or Filipino native troops (2.02).

For diseases and injuries the total loss of time, including days for cases admitted prior to 1920, amounted to 3,852,130 days, or the loss of one year's time for 10,533 men. The total noneffective rate was 50.25, but excluding days lost for cases admitted prior to 1920 it was only 38.56.

Enlisted men, United States. Diseases only.—The noneffective rate for white enlisted man in the United States for 1920 cases only was 31.57, which was higher than the corresponding rate for the colored troops (25.95). It was lower than the corresponding rate for white enlisted men in Europe (35.08), Philippine Islands (64.28), China (69.57), and Siberia (73.78), but higher than that for them in Hawaii (30.21), or in Panama (22.68). Table 10 shows that this rate for the whites was lower than the corresponding rates for 1918 and 1919, but higher than that for any other one for the preceding years of the decade. On the other hand, the corresponding rate for the colored troops was lower than that for any other year in the decade, with the exception of those for three years, namely, 1911, 1912, and 1915.

Including days lost for cases admitted prior to 1920, the noneffective rate for the white in the United States was 40.80, which was slightly higher than the corresponding rate for the colored (40.66). For the total days, the leading cause for the loss of time by the white troops was tuberculosis (5.07), followed by gonorrhea (4.10), influenza (2.98); and by the colored troops, tuberculosis (9.63), gonorrhea (4.17), and syphilis (2.90).

External causes.—For 1920 cases only the noneffective rate for injuries for white enlisted men was 6.37, which was higher than the corresponding rate for the colored (4.94), but was lower than the corresponding rates for the white troops in Europe (12.05), and in China (10.22). These latter rates were higher than the corresponding rates for the white troops in the other countries where they were stationed.

Enlisted men in Europe. Diseases only.—For white enlisted men in Europe for 1920 cases only this rate was 35.08, but including days lost for cases admitted prior to 1920, it was 63.55. For the latter rate the leading causes for the loss of time were: Gonorrhea (19.53), syphilis (4.84), chancroid (3.97), and tuberculosis (3.13).

External causes.—For injuries for 1920 cases only this rate was 12.05, which was an exceptionally high one, being the highest recorded for any troops during the year. The only other one approaching the height of it was that for the white troops in Siberia (10.22). Including days lost for cases admitted prior to 1920 the rate was still more excessive (20.24). Among the specified diagnoses the rate for simple fractures alone was 5.75, for compound fractures 6.30, or a total of 12.05. The leading causes were: Firearms (3.14), falls (3.14), and motor-cycle accidents (2.76).

Enlisted men, Philippine Islands. Diseases only.—For 1920 cases only this rate for the white troops in the Philippine Islands for diseases was quite high, being 64.28, which was higher than the corresponding rate for our troops in any other country where they were serving, with the exception of China and Siberia. It was much higher than the corresponding rate for the colored troops in the Philippine Islands (37.67).

Table 10 shows that this rate far exceeded any other corresponding rate for white troops during the decade. The leading causes for the loss of time were: Gonorrhea (15.97), chancroid (5.94), dengue (4.92), and diseases of the nervous system (4.23).

External causes.—For days lost as the result of injuries for 1920 cases only this rate for white enlisted men was 4.47. This rate was lower than that for the colored troops, and compared favorably with the other corresponding rates for American troops. Including days lost for cases admitted prior to 1920, this rate for white troops was 4.49 and for colored 4.94 per 1,000.

Enlisted men in Hawaii. Diseases only.—For 1920 cases only this rate for the white troops in Hawaii was 30.21, which was lower than any corresponding rate for white troops in any other country, with the exception of that for Panama (22.68). Table 10 shows that it was, however, excessive as compared with the other rates for Hawaii for the decade, the only ones exceeding it being those for 1911 (36.18) and 1919 (33.59). Including the days lost for cases admitted prior to 1920, the noneffective rate was 34.14. For this rate the leading causes for the loss of time were: Gonorrhea (4.90), bronchitis (1.90), and tuberculosis (1.14).

External causes.—This rate for injuries for 1920 cases only was 7.30. This was above the average for the year, being exceeded only by those for the white troops in Europe (12.05) and in Siberia (10.22). The noneffective rate for simple fractures was 2.41 and for compound fractures 0.69.

Enlisted men in Panama. Diseases only.—For 1920 cases only the noneffective rate for white troops in Panama was 22.68, which was the lowest recorded in any country for our enlisted men during the year. Table 10 shows that it was also below the average for the decade for white troops in Panama, the only rates below it being those for the years 1911 (20.54) and 1915 (22.01). The more important causes of the loss of time were: Gonorrhea (1.92), malarial fevers (1.48), bronchitis (1.38), and chancroid (1.28).

External causes.—This rate for injuries for 1920 cases only was 4.80, which was about the average rate for white troops for the year, if the excessive rates in Europe and Siberia are excluded. Including the days lost for cases admitted prior to 1920, the rate was 4.93, which also compared favorably with the rates for white troops in other countries.

Enlisted men in China. Diseases only.—The rate for white troops in China for 1920 cases only was quite excessive (69.57), being higher in fact than any corresponding rate with the exception of that for troops in Siberia (73.78). Including the days lost for cases admitted prior to 1920, the rate was 72.36. The more important causes for the loss of time were: Gonorrhea (28.80), chancroid (10.83), syphilis (4.65), and bronchitis (2.61). Venereal diseases caused 61.2 per cent of the total loss of time.

External causes.—This rate for injuries for 1920 cases only was low, being only 2.96. Including the days lost for cases admitted prior to 1920, the rate was 3.24.

TABLE 10.—*Diseases (all)—Noneffective rate, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	26.74	37.83	36.18	22.54	20.55	.....
1912	22.72	39.35	26.57	24.30	19.09	43.88
1913	18.37	26.95	18.08	26.61	26.67	26.21
1914	18.62	27.29	13.86	33.39	26.11	23.56
1915	[1] 20.71	24.62	17.09	22.01	24.74	31.73
1916	20.71	23.33	15.49	23.45	87.34	29.27
1917	22.06	31.45	23.13	23.69	28.55	38.96
1918	49.42	44.25	22.86	28.15	79.72	37.87
1919	55.80	40.76	33.59	22.81	78.94	35.19
1920 [2]	31.57	64.28	30.21	22.68	25.95	37.67

[1] Includes National Guard officers.
[2] Does not include days lost for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

NATIVE TROOPS.

Philippine Scouts. Diseases only.—For the native Filipino troops this rate was quite low, being only 12.96 per 1,000, which was by far the lowest rate recorded for officers or for enlisted men during the year. Including days lost for cases admitted prior to 1920, it was only 13.92. The more important causes for the loss of time were: Gonorrhea (1.52), tuberculosis (1.25), and malarial fevers (0.96).

External causes.—For days lost as the result of injuries for 1920 cases only the rate for these troops was, as was the rate for diseases, quite low, being only 2.02. This rate was also much below that for any other color troops or for officers. Including days lost for cases admitted prior to 1920, the rate was only 2.05.

Porto Rican native troops. Diseases only.—The noneffective rate for 1920 cases only for these troops was 34.16, which was higher than the rate for any of the other color troops or for officers. Including days lost for cases admitted prior to 1920 it was 35.95. This rate falls below that for officers and white or colored enlisted men, but

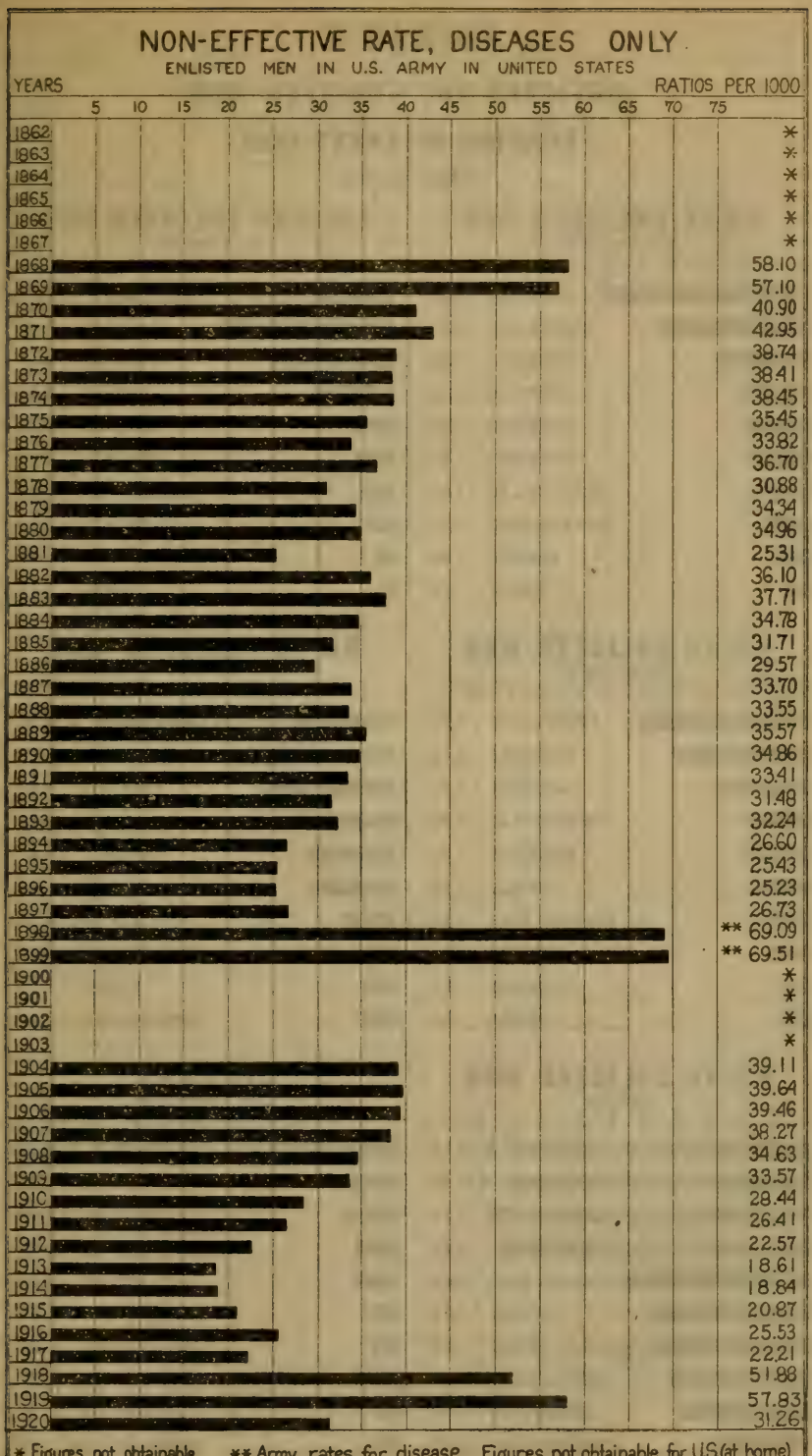
NON-EFFECTIVE RATE, DISEASES ONLY.
ENLISTED MEN IN U.S. ARMY IN UNITED STATES
YEARS
RATIOS PER 1000
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75
1862 *
1863 *
1864 *
1865 *
1866 *
1867 *
1868 58.10
1869 57.10
1870 40.90
1871 42.95
1872 39.74
1873 38.41
1874 38.45
1875 35.45
1876 33.82
1877 36.70
1878 30.88
1879 34.34
1880 34.96
1881 25.31
1882 36.10
1883 37.71
1884 34.78
1885 31.71
1886 29.57
1887 33.70
1888 33.55
1889 35.57
1890 34.86
1891 33.41
1892 31.48
1893 32.24
1894 26.60
1895 25.43
1896 25.23
1897 26.73
1898 ** 69.09
1899 ** 69.51
1900 *
1901 *
1902 *
1903 *
1904 39.11
1905 39.64
1906 39.46
1907 38.27
1908 34.63
1909 33.57
1910 28.44
1911 26.41
1912 22.57
1913 18.61
1914 18.84
1915 20.87
1916 25.53
1917 22.21
1918 51.88
1919 57.83
1920 31.26
* Figures not obtainable. ** Army rates for disease. Figures not obtainable for U.S.(at home).

FIG. 7

DAYS LOST

OFFICERS AND ENLISTED MEN

LEADING DISEASES 1920

RATIOS PER 1000

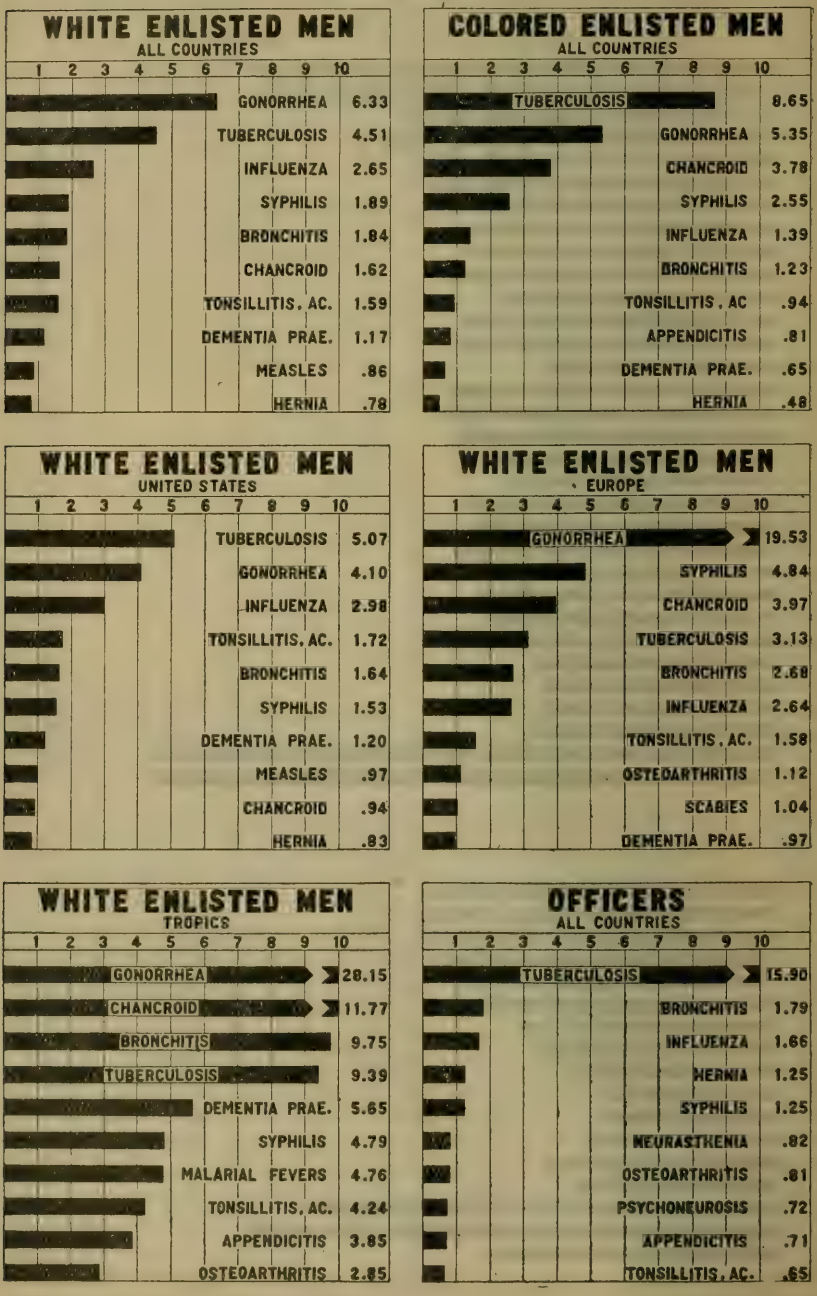

FIG. 8.

stands much above that for the Filipino native troops. The more important causes for loss of time were: Syphilis (4.62), chancroid (4.28), bronchitis (3.14), and polyneuritis (apparently beriberi) (2.83).

External causes.—For injuries this rate for 1920 cases only was 5.41. This was below the corresponding rate for white troops and for officers, but above that for colored enlisted men and native Filipino troops. Including days lost for cases admitted prior to 1920, it was 5.41. This was below the corresponding rate for officers and white enlisted men, but above that for the native Filipino troops and colored troops.

ARMY NURSES.

Diseases only.—The loss of time for the nurses which is shown in Table XIII for 1920 cases only amounted to 27,350 days, but including days lost for cases admitted prior to 1920, to 51,997. For 1920 cases only the noneffective rate was 33.92, which was above that for officers (26.36), white enlisted men (33.65), colored enlisted men (28.09), or Filipino native troops (12.96), but below that for the Porto Rican native troops (34.16). For the total days, including those lost for cases admitted prior to 1920 the rate was 64.49. This places it above the rates for officers or for any of the color troops. For this latter rate, for the nurses, the more important causes for the loss of time were: Tuberculosis (26.00), influenza (2.71), and bronchitis (2.44). Tuberculosis alone accounted for 40.31 per cent of the total loss of time. It was the retention in hospital of cases of tuberculosis among the nurses from the war Army that caused this excess loss of time for it.

INFLUENCE OF SEASON.

Tables 11 and 12 have been prepared to show for total officers and enlisted men by color and by country, the movement of the sick by months, or the influence of season. In considering these data for the enlisted men in the United States, Europe, and Philippine Islands, reference should be made to Tables 32 to 38, showing the monthly prevalence of special infectious diseases, and also to Table 1, showing the enlistments by months.

Admissions.—For white and colored troops in the United States, the highest admission rate was for the month of January, due to the influenza epidemic, which reached its height during that month. For white enlisted men in Europe, the highest admission rate was also in January, likewise due to influenza, which had reappeared there in epidemic form in December, 1919. In the Philippine Islands for the white enlisted men the highest admission rate was in July, due to the dengue epidemic, which reached its height in July and August. Though there were the same number of cases of dengue admitted in August, the general admission rate was lower, due among other things to a smaller number of cases of venereal diseases admitted during the month. For the colored troops in the Philippine Islands the highest admission rate was in January. For the white troops in other countries the highest admission rates were as follows: Hawaii in May, China in February, and Panama in April. For the native Porto Rican troops, the highest admission rate was in March, and for the native Filipino troops in July.

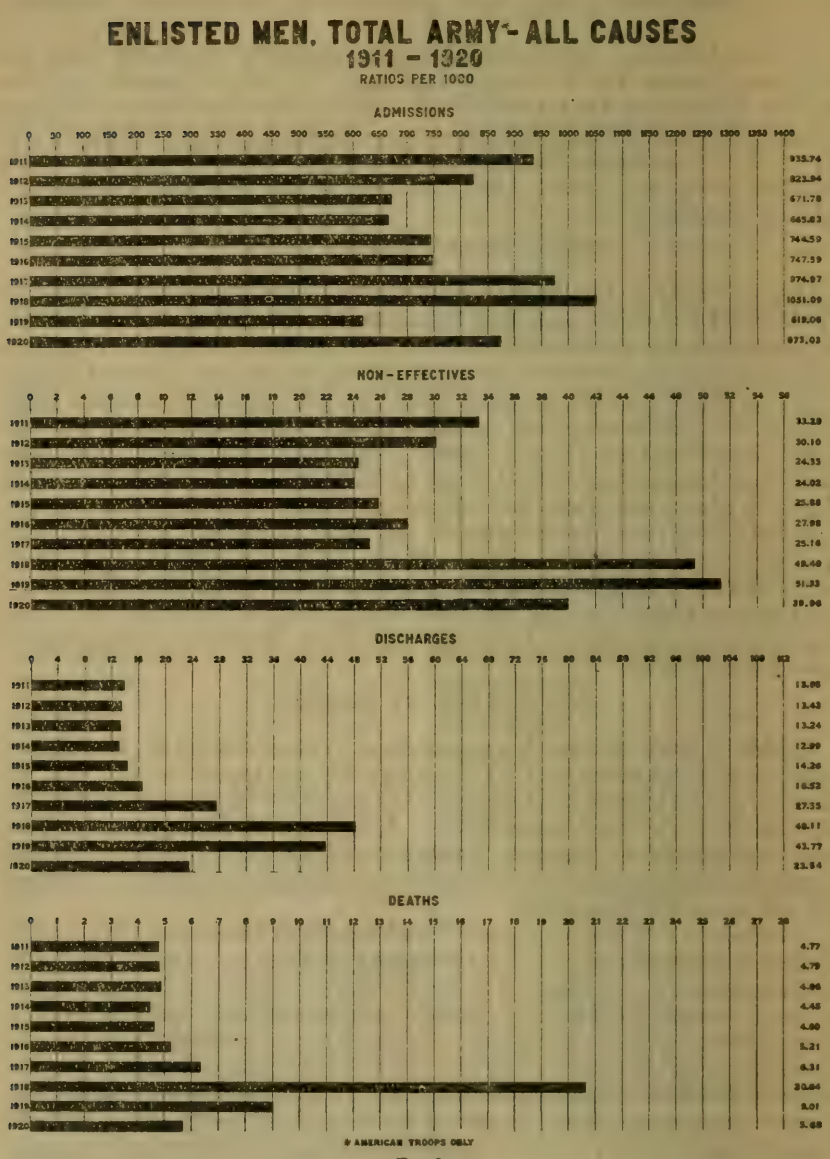
ENLISTED MEN, TOTAL ARMY - ALL CAUSES
1911 - 1920
RATIOS PER 1000
ADMISSIONS
NON-EFFECTIVES
DISCHARGES
DEATHS
* AMERICAN TROOPS ONLY

FIG. 9.

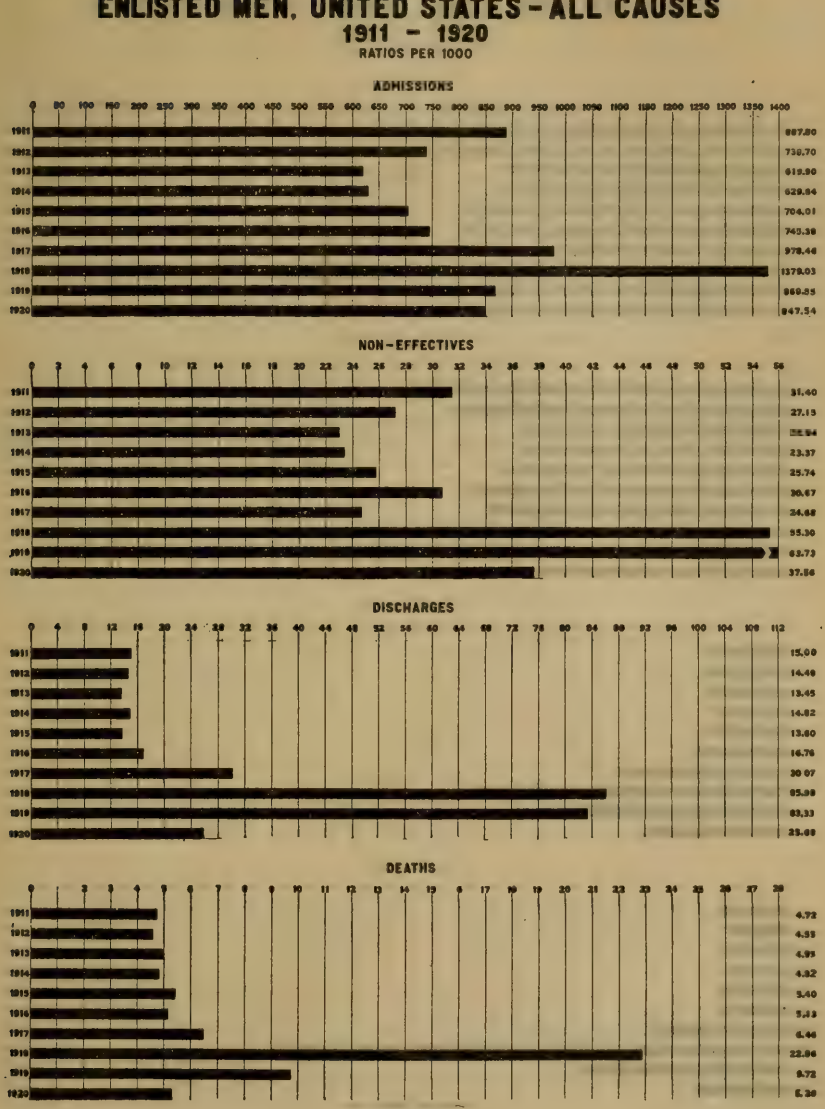
ENLISTED MEN, UNITED STATES - ALL CAUSES
1911 - 1920
RATIOS PER 1000
ADMISSIONS
NON-EFFECTIVES
DISCHARGES
DEATHS

FIG. 10.

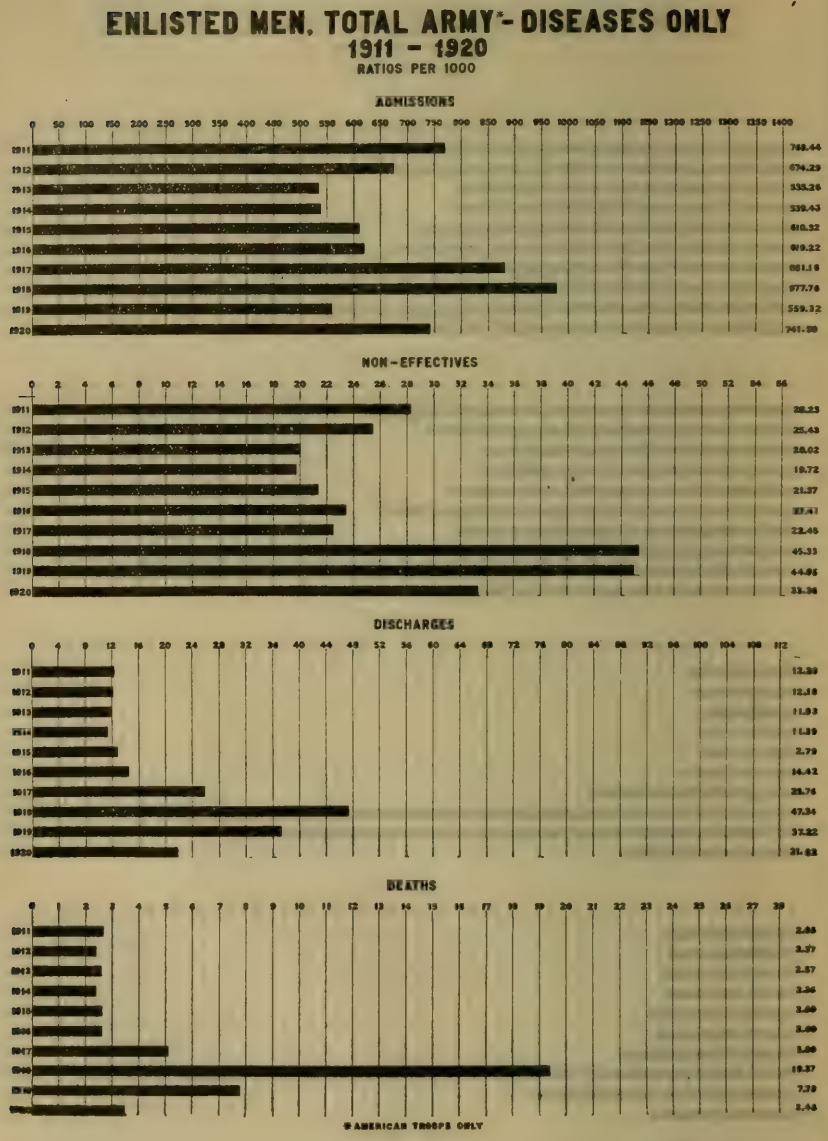
ENLISTED MEN, TOTAL ARMY*- DISEASES ONLY
1911 - 1920
RATIOS PER 1000
ADMISSIONS
NON-EFFECTIVES
DISCHARGES
DEATHS
*AMERICAN TROOPS ONLY

FIG. 11.

Deaths.—For deaths which resulted from 1920 cases only the highest rates for white troops were: United States in January, Europe in January, Philippine Islands in January, Hawaii in April, China in January. For the colored troops in the United States it was in January, and in the Philippine Islands in June. It is apparent that the high death rate during the early part of the year was due to the influenza epidemic.

Noneffective rate.—For days lost or for the noneffective rate, the highest rate for whites in the United States was in January, in Europe in May, in the Philippine Islands in January, in Hawaii in January, in China in March, and in Panama in June. The excessively high rate for the white troops in the Philippine Islands for January (104.51) was due to the great loss of time for that month's cases of venereal diseases and tuberculosis. For the colored troops in the United States the highest noneffective rate was in January, in the Philippine Islands in June.

Discharges for disability.—The highest discharge rate for white troops in the United States was also in January. For these troops in Europe it was in July, Philippine Islands in May, Hawaii in February, and Panama in June. For the colored troops the highest discharge rate for those in the United States was in July, in the Philippine Islands in April.

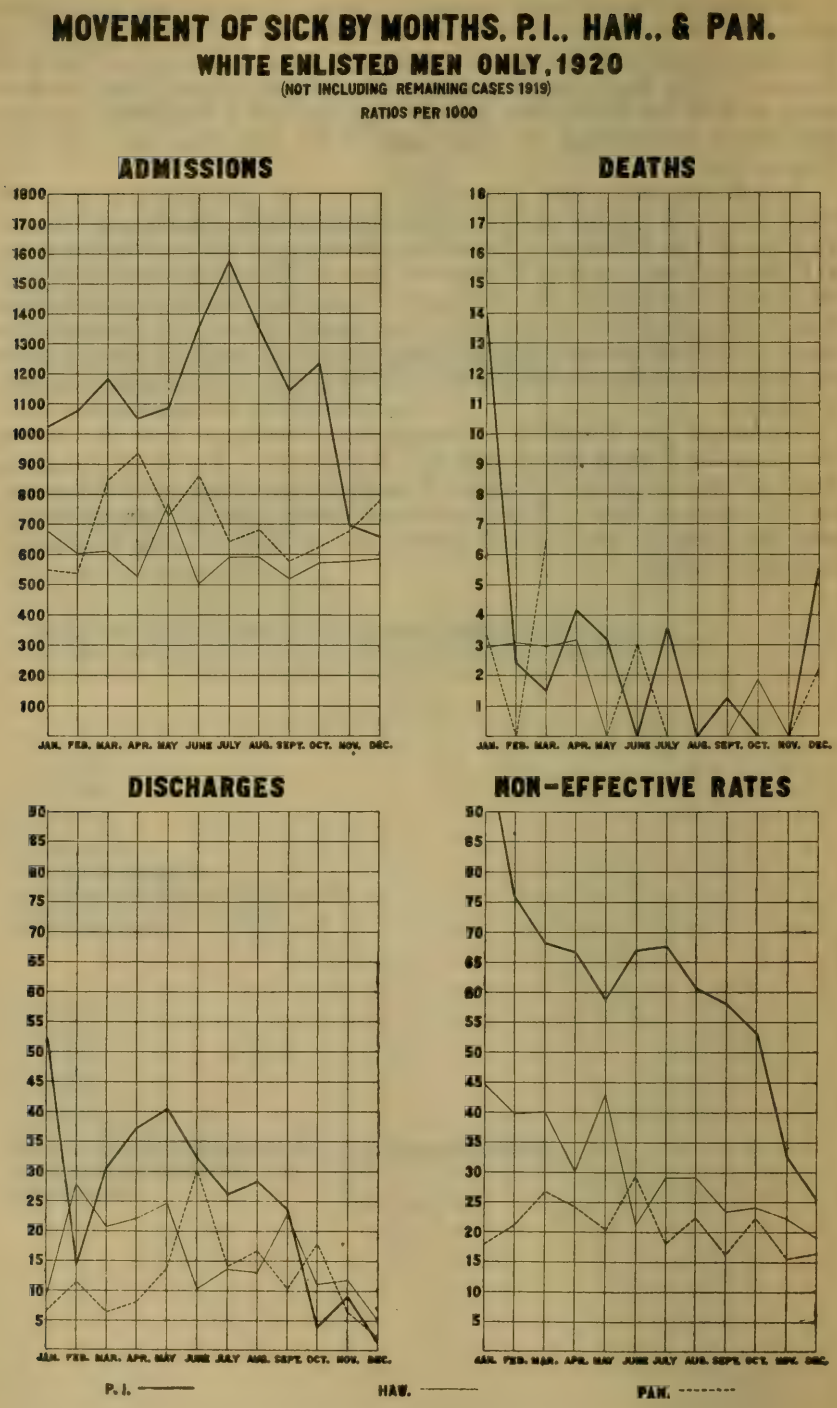
MOVEMENT OF SICK BY MONTHS. P.I., HAW., & PAN.
WHITE ENLISTED MEN ONLY, 1920
(NOT INCLUDING REMAINING CASES 1919)
RATIOS PER 1000
ADMISSIONS
DEATHS
DISCHARGES
NON-EFFECTIVE RATES
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.
P.I.
HAW.
PAN.

FIG. 12.

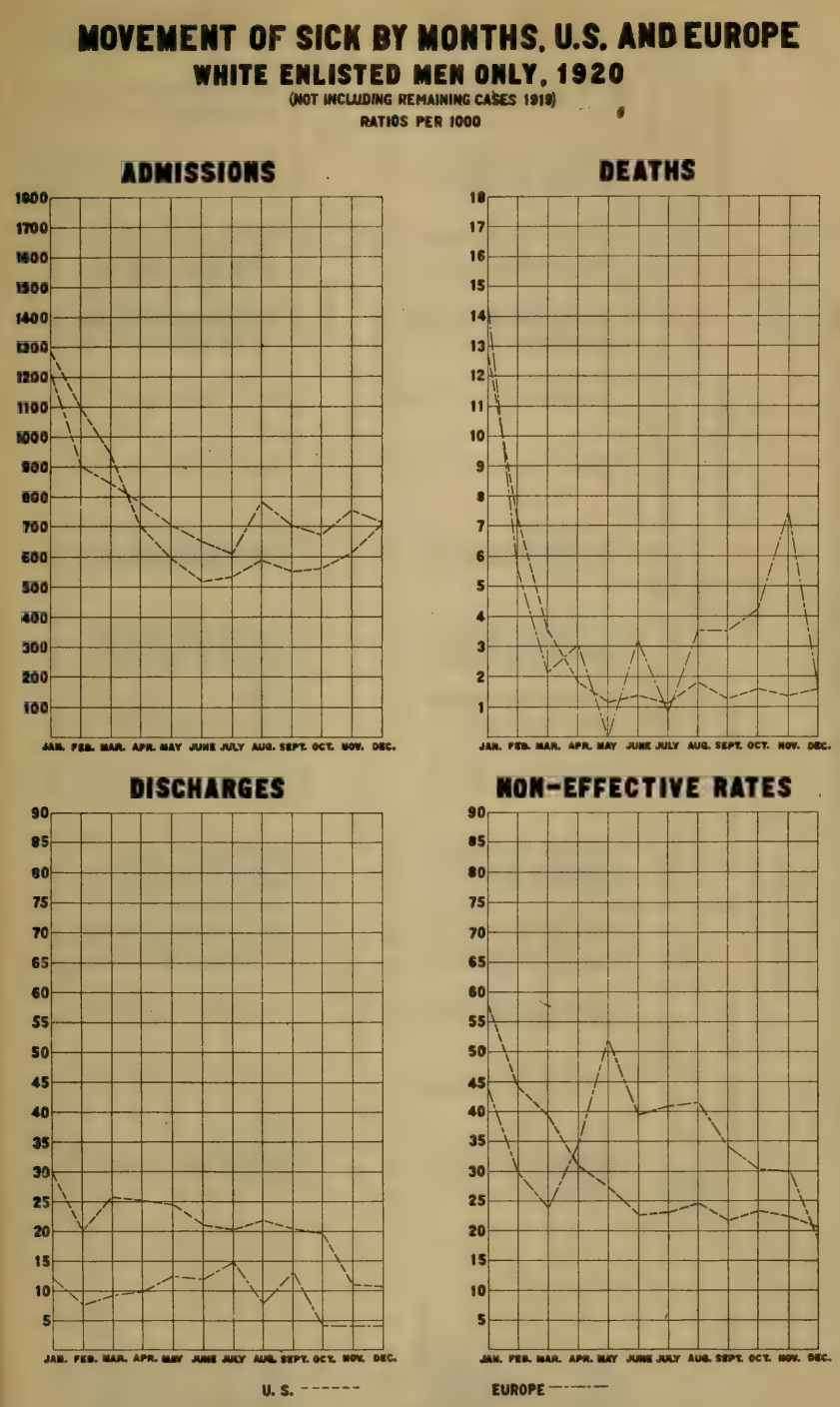
MOVEMENT OF SICK BY MONTHS, U.S. AND EUROPE
WHITE ENLISTED MEN ONLY, 1920
(NOT INCLUDING REMAINING CASES 1919)
RATIOS PER 1000
ADMISSIONS
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.
DEATHS
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.
DISCHARGES
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.
NON-EFFECTIVE RATES
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
JAN. FEB. MAR. APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC.
U. S. ------
EUROPE ——·——

FIG. 13.

TABLE 11.—*Movement of the sick by months, white enlisted men, various countries, 1920.*

Months.	UNITED STATES.								EUROPE.							
	Absolute numbers.				Ratios per 1,000.				Absolute numbers.				Ratios per 1,000.			
	Admissions.	Deaths.[1]	Discharges.[1]	Days lost.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Noneffective.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Days.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Noneffective.[1]
January	15,080	149	350	248,472	1,282.20	12.67	29.76	57.72	1,698	20	17	22,475	1,210.26	14.25	12.12	43.77
February	13,260	88	243	195,446	1,095.05	7.27	20.07	44.10	1,293	8	11	15,657	900.42	5.57	7.66	29.79
March	11,160	42	304	171,003	940.10	3.54	25.61	39.36	1,186	3	13	12,223	844.13	2.14	9.25	23.77
April	7,966	21	288	129,325	695.96	1.83	25.16	30.87	1,032	4	13	16,642	778.87	3.02	9.81	34.32
May	6,681	13	276	113,038	593.50	1.15	24.52	27.43	903	.....	16	24,327	702.72	.....	12.45	51.73
June	5,671	15	232	90,847	518.14	1.37	21.20	22.68	820	4	15	18,245	650.28	3.17	11.90	39.54
July	5,857	12	223	92,959	534.55	1.10	20.35	23.18	737	1	18	18,128	608.09	.83	14.85	40.87
August	6,517	20	242	100,108	586.59	1.80	21.78	24.62	891	4	9	17,257	780.89	3.51	7.89	41.33
September	6,136	14	228	88,508	551.15	1.26	20.48	21.72	799	4	15	14,133	703.35	3.52	13.20	33.99
October	6,370	18	224	97,022	559.80	1.58	19.69	23.30	794	5	5	13,075	672.31	4.23	4.23	30.25
November	7,268	16	131	97,186	611.32	1.35	11.02	22.33	912	9	5	13,284	752.48	7.43	4.13	29.95
December	9,378	21	142	99,704	705.22	1.58	10.68	20.49	871	2	5	8,359	712.77	1.64	4.09	18.69
Month not stated	55	17	490	83,851	.....	.....	.....	.....	97	3	26	1,581	.....	.....	.....	.....
Total	101,399	446	3,373	1,607,469	728.69	3.21	24.24	31.57	12,033	67	168	195,386	790.66	4.40	11.04	35.08

Months.	PHILIPPINE ISLANDS.								HAWAII.							
	Absolute numbers.				Ratios per 1,000.				Absolute numbers.				Ratios per 1,000.			
	Admissions.	Deaths.[1]	Discharges.[1]	Days lost.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Noneffective.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Days.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Noneffective.[1]
January	294	4	15	10,978	1,024.39	13.94	52.26	104.51	231	1	3	5,574	677.42	2.93	8.80	44.66
February	449	1	6	11,588	1,076.74	2.40	14.39	75.93	196	1	9	4,742	601.23	3.07	27.61	39.75
March	781	1	20	16,594	1,181.54	1.51	30.26	68.18	206	1	7	4,957	609.47	2.96	20.71	40.07
April	1,018	4	36	23,634	1,050.57	4.13	37.15	66.64	166	1	7	3,485	525.32	3.16	22.15	30.13
May	1,024	3	38	20,186	1,087.05	3.19	40.34	58.55	281	.....	9	5,738	767.76	.....	24.59	42.83
June	1,092	.....	26	19,717	1,354.84	.....	32.26	66.84	194	.....	4	2,994	502.59	.....	10.36	21.20
July	1,330	3	22	20,920	1,573.96	3.55	26.04	67.65	216	.....	5	3,886	590.16	.....	13.66	29.01
August	1,147	.....	24	18,824	1,351.01	.....	28.27	60.58	227	.....	5	4,104	591.15	.....	13.02	29.20
September	923	1	19	17,120	1,142.33	1.24	23.51	57.89	228	.....	10	3,781	518.18	.....	22.73	23.48
October	954	.....	3	15,062	1,230.97	.....	3.87	53.10	308	1	6	4,749	572.49	1.86	11.15	24.12
November	531	.....	7	9,059	697.76	.....	9.20	32.53	340	.....	7	4,777	577.25	.....	11.88	22.16
December	477	4	1	6,727	659.75	5.53	1.38	25.42	350	.....	3	4,113	587.24	.....	5.03	18.86
Month not stated	7	.....	7	17,560	.....	.....	.....	.....	3	.....	1	2,226	.....	.....	.....	.....
Total	10,027	21	224	207,969	1,134.15	2.38	25.34	64.28	2,946	5	76	55,126	590.97	1.00	15.25	30.21

	CHINA.								PANAMA.							
January	85	2	1	1,700	913.98	21.51	10.75	49.95	165	1	2	1,969	548.17	3.32	6.64	17.88
February	169	.....	.....	3,998	1,877.78	.....	.....	121.37	189	.....	4	2,721	535.41	.....	11.33	21.06
March	137	.....	.....	3,820	1,522.22	.....	.....	115.97	262	2	2	3,023	842.45	6.43	6.43	26.56
April	137	2	.....	3,040	1,212.39	17.70	.....	73.51	343	.....	3	3,266	932.07	.....	8.15	24.25
May	124	2	.....	2,724	1,252.52	20.20	.....	75.18	264	.....	5	2,704	727.27	.....	13.77	20.35
June	93	.....	.....	2,175	808.70	.....	.....	51.67	287	1	10	3,603	859.28	2.99	29.94	29.47
July	115	1	.....	2,297	982.90	8.55	.....	53.64	226	.....	5	2,330	643.87	.....	14.24	18.14
August	86	.....	.....	1,794	895.83	.....	.....	51.06	246	.....	6	2,947	679.56	.....	16.57	22.24
September	126	1	1	2,908	1,016.13	8.06	8.06	64.08	222	.....	4	2,286	578.12	.....	10.42	16.26
October	90	.....	.....	2,372	891.09	.....	.....	64.17	244	.....	7	3,183	622.45	.....	17.86	22.19
November	102	.....	3	2,310	1,009.90	.....	29.70	62.49	306	.....	3	2,581	678.49	.....	6.65	15.64
December	72	2	1	1,456	757.89	21.05	10.53	41.88	355	1	1	2,727	780.22	2.20	2.20	16.37
Month not stated	2	.....	.....	800	.....	.....	.....	.....	4	.....	3	3,397	.....	.....	.....	.....
Total	1,338	10	6	31,394	1,085.16	8.11	4.87	69.57	3,113	5	55	36,737	703.34	1.13	12.43	22.68

[1] Does not include deaths, discharges, and days lost for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

TABLE 12.—*Movement of the sick by months, officers and enlisted men, 1920.*

Months.	OFFICERS UNITED STATES ARMY.								WHITE ENLISTED MEN ON TRANSPORTS.							
	Absolute numbers.				Ratios per 1,000.				Absolute numbers.				Ratios per 1,000.			
	Admissions.	Deaths.[1]	Discharges.[1]	Days lost.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Noneffective.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Days lost.[1]	Admissions.	Deaths.[1]	Discharges.[1]	Noneffective.[1]
January	1,108	14	31	19,181	854.94	10.80	23.92	40.44	196	7	9	5,617	739.62	26.41	33.96	57.91
February	775	9	38	15,512	617.53	7.17	30.28	33.77	87	.....	2	1,657	397.26	.....	9.13	20.67
March	608	6	22	12,351	490.72	4.84	17.75	27.24	110	5	1	1,350	555.56	25.25	5.05	18.63
April	436	3	10	7,909	348.24	2.40	7.99	17.26	118	.....	1	3,504	422.94	.....	3.58	34.32
May	416	5	16	9,239	335.75	4.04	12.91	20.39	34	.....	1	397	202.38	.....	5.95	6.46
June	380	4	22	9,291	315.09	3.32	18.24	21.05	18	.....	.....	222	156.52	.....	.....	5.27
July	388	.....	10	8,097	326.05	.....	8.40	18.59	18	.....	.....	233	114.65	.....	.....	4.06
August	349	3	18	7,111	291.31	2.50	15.02	16.22	37	.....	1	1,156	251.70	.....	6.80	21.49
September	350	4	18	7,382	311.39	3.56	16.01	17.95	49	.....	2	540	379.85	.....	15.50	11.44
October	314	2	8	6,036	275.68	1.76	7.02	14.48	30	.....	.....	263	240.00	.....	.....	5.75
November	353	3	10	5,207	318.30	2.71	9.02	12.83	26	.....	2	500	400.00	.....	30.77	21.02
December	353	2	3	3,119	325.95	1.85	2.77	7.87	72	.....	.....	547	660.55	.....	.....	13.71
Month not stated	4	2	123	27,831	.....	.....	.....	.....	5	.....	1	878	.....	.....	.....	.....
Total	5,834	57	329	138,266	407.12	3.98	22.96	26.36	800	12	20	16,864	405.06	6.08	10.13	23.33

COLORED TROOPS.

Months.	UNITED STATES.								PHILIPPINE ISLANDS.							
January	485	9	12	9,194	668.04	12.40	16.53	34.60	123	3	1	2,824	825.50	20.13	6.71	51.79
February	463	4	7	6,911	632.51	5.46	9.56	25.80	93	.....	1	2,157	577.64	.....	6.21	36.61
March	342	6	4	5,660	465.94	8.17	5.45	21.07	94	.....	1	1,712	566.26	.....	6.02	28.18
April	269	1	6	5,037	370.14	1.38	8.25	18.93	82	1	3	2,334	512.50	6.25	18.75	39.86
May	258	4	6	4,768	379.97	5.89	8.84	19.19	85	.....	1	1,500	559.21	.....	6.58	26.96
June	229	1	12	5,004	344.36	1.50	18.05	20.56	102	4	1	2,795	708.33	27.78	6.94	53.03
July	240	3	12	4,454	489.80	6.12	24.49	24.84	75	.....	1	1,655	547.44	.....	7.30	33.01
August	347	5	12	5,992	595.20	8.58	20.58	28.08	81	2	2	1,913	591.24	14.60	14.60	38.15
September	344	5	11	6,343	562.09	8.17	17.97	28.32	49	.....	.....	899	360.29	.....	.....	18.03
October	345	4	10	5,467	576.92	6.69	16.72	24.98	65	.....	.....	1,278	485.07	.....	.....	25.06
November	321	3	7	5,611	532.34	4.98	11.61	25.43	68	2	.....	1,333	539.68	15.87	.....	28.91
December	291	2	2	3,793	473.17	3.25	3.25	16.85	71	.....	.....	1,349	541.98	.....	.....	28.14
Month not stated	2	2	21	5,511	.....	.....	.....	.....	1	.....	.....	2,141	.....	.....	.....	.....
Total	3,936	49	122	73,715	506.96	6.31	15.71	25.95	989	12	11	23,890	570.69	6.92	6.35	37.67

Months.	PORTO RICAN.								FILIPINO.							
January	118	.....	.....	1,730	936.51	.....	.....	37.51	331	1	7	4,370	445.50	1.35	9.42	46.07
February	161	.....	.....	1,559	1,267.71	.....	.....	33.54	224	2	6	3,799	310.25	2.77	8.31	14.38
March	212	1	.....	1,666	1,723.58	8.13	.....	37.01	209	.....	8	3,083	327.07	.....	12.52	13.18
April	112	.....	7	2,042	903.23	.....	56.45	45.00	198	.....	4	2,277	345.55	.....	6.98	10.86
May	124	.....	1	1,467	992.00	.....	8.00	32.07	197	.....	8	2,723	335.61	.....	13.63	12.67
June	128	.....	7	1,703	1,032.26	.....	56.45	37.52	180	1	5	2,375	309.81	1.72	8.61	11.17
July	94	.....	3	1,753	783.33	.....	25.00	39.91	267	1	15	2,696	466.78	1.75	26.23	12.88
August	85	.....	2	741	726.50	.....	17.09	17.30	221	1	19	2,446	397.48	1.80	34.17	12.02
September	81	.....	1	1,153	723.21	.....	8.93	28.13	208	1	10	2,542	358.00	1.72	17.21	11.95
October	74	1	1	1,042	601.63	8.13	8.13	23.15	216	1	6	2,949	384.34	1.78	10.68	14.34
November	127	.....	9	1,947	803.80	.....	56.96	33.67	149	2	3	2,043	251.69	3.38	5.07	9.43
December	149	.....	.....	1,396	973.85	.....	.....	24.93	198	2	2	2,282	337.31	3.41	3.41	10.62
Month not stated	1	.....	5	965	.....	.....	.....	.....	3	.....	3	1,022	.....	.....	.....	.....
Total	1,466	2	36	19,164	956.29	1.30	23.48	34.16	2,601	12	96	34,607	356.55	1.65	13.16	12.96

[1] Does not include deaths, discharges, and days lost for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

INFLUENCE OF RACE.

Admissions.—For the color races, the Porto Ricans had the highest admission rate, the whites the second, the colored the third, and the Filipinos the fourth. The leading causes of admissions were: For the Porto Ricans, bronchitis (191.13), enteritis and colitis (76.32), influenza (49.57), and mumps (44.35); for the white troops, acute follicular tonsillitis (73.14), bronchitis (68.27), influenza (59.39), and gonorrhea (53.74); for the colored troops, gonorrhea (56.65), chancroid (38.12), bronchitis (37.80), and influenza (36.64); and for the Filipino troops, bronchitis (27.42), malarial fever (26.32), dengue (16.31), and gonorrhea (14.80).

Deaths.—For 1920 cases only the colored troops had the highest rate (6.40), the whites the second (3.30), the Filipinos the third (1.65), and Porto Ricans the fourth (1.30). Including deaths that occurred during 1920 for the cases admitted prior to 1920, the highest death rate was for the colored (10.74), the second for the white (4.41), the third for the Porto Ricans (1.96), and the fourth for the Filipinos (1.65). For individual diseases and including deaths for cases admitted prior to 1920, the leading causes of deaths were: White troops, tuberculosis (1.07), influenza (0.86), lobar pneumonia (0.55), and broncho-pneumonia (0.34); colored troops, tuberculosis (6.21), nephritis (0.84), influenza (0.53), and lobar pneumonia (0.42); Filipino native troops, cardiac hypertrophy and dilatation (0.41), tuberculosis (0.41), and broncho-pneumonia (0.27); and Porto Rican troops, lobar pneumonia (1.30), and mental alienation (psychosis) (0.65).

Days lost or noneffective rate.—For cases admitted during 1920 the highest noneffective rate was for the Porto Rican troops (34.16), followed in order named, by the white troops (33.65), colored (28.09), and Filipino native troops (12.96). For cases admitted prior to 1920, including the days lost, the leading causes for the loss of time were: Porto Ricans, syphilis (4.62), chancroid (4.28), bronchitis (3.14), polyneuritis (apparently beriberi) (2.83); white troops, gonorrhea (6.33), tuberculosis (4.51), influenza (2.63), and syphilis (1.89); colored enlisted men, tuberculosis (8.65), gonorrhea (5.35), chancroid (3.78), and syphilis (2.55); and Filipino troops, gonorrhea (1.52), tuberculosis (1.25), malarial fevers (0.96), and mumps (0.87).

Discharges for disability.—For discharges for disability for 1920 cases only, the rate was highest for the Porto Rican troops (23.48), followed in the order named by the white (22.24), colored (14), and Filipino native troops (13.16). The leading causes for discharges, including cases admitted prior to 1920 were, for the Porto Rican troops, polyneuritis (7.18), tuberculosis (4.57), syphilis (3.26), and psychosis (manic depressive) (1.30); for the white troops, tuberculosis (13.98), dementia præcox (3.39), mental deficiency (2.05), and constitutional psychopathic state (2.05).

Case mortality.—For 1920 cases only, the case mortality for disease or the percentage of deaths of the cases was highest for the colored troops (1.24), second for the Filipino troops (0.46), third for the white troops (0.44), and lowest for the Porto Rican troops (0.14).

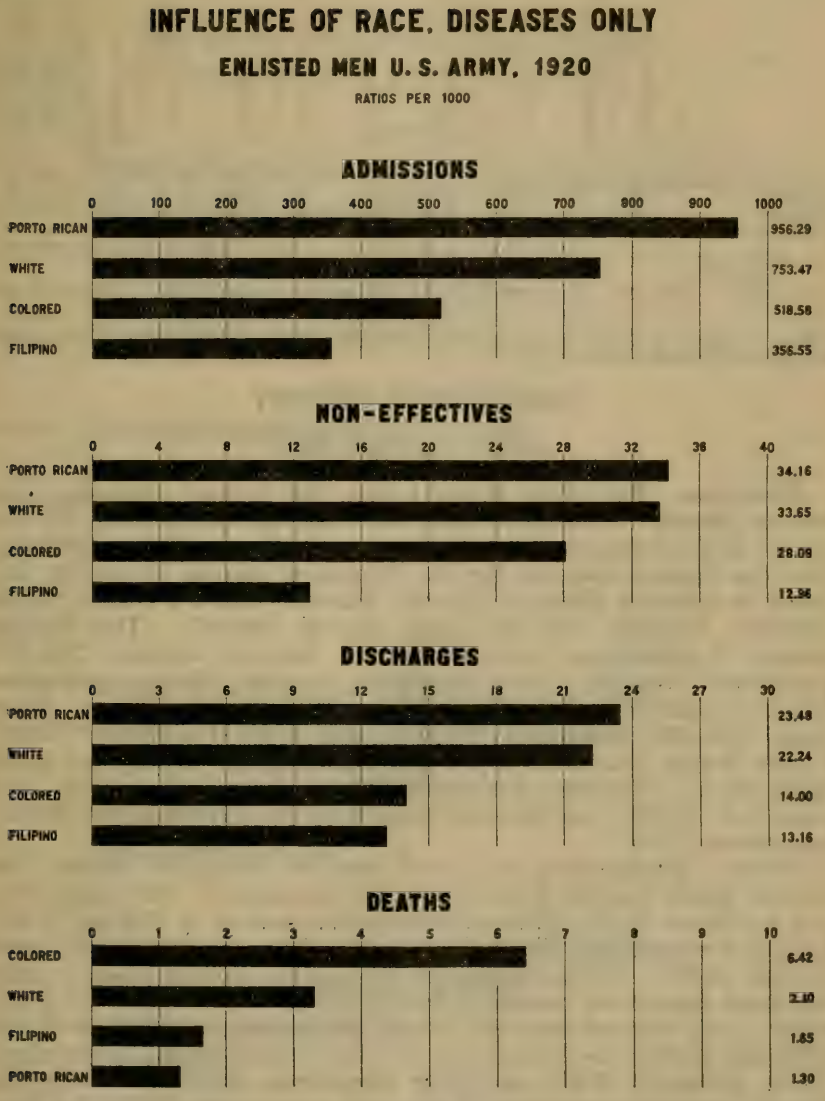
INFLUENCE OF RACE. DISEASES ONLY
ENLISTED MEN U. S. ARMY, 1920
RATIOS PER 1000
ADMISSIONS
0 100 200 300 400 500 600 700 800 900 1000
PORTO RICAN 956.29
WHITE 753.47
COLORED 518.58
FILIPINO 356.55
NON-EFFECTIVES
0 4 8 12 16 20 24 28 32 36 40
PORTO RICAN 34.16
WHITE 33.65
COLORED 28.09
FILIPINO 12.36
DISCHARGES
0 3 6 9 12 15 18 21 24 27 30
PORTO RICAN 23.48
WHITE 22.24
COLORED 14.00
FILIPINO 13.16
DEATHS
0 1 2 3 4 5 6 7 8 9 10
COLORED 6.42
WHITE 3.10
FILIPINO 1.85
PORTO RICAN 1.30

FIG. 14.

TABLE 13.—*Diseases (all)—Influence of race on the movement of the sick, total enlisted men, United States Army, 1920; absolute numbers and ratios, per 1,000.*[1]

Race.	Absolute numbers.				Ratios per 1,000.					Percentage.	
	Admissions.	Deaths.	Discharges.	Days lost.	Admissions.	Deaths.	Discharges.	Noneffectives.	Case mortality.	Per cent of cases discharged for disability.	Days lost per case.
White	133,221	584	3,932	2,177,326	753.47	3.30	22.24	33.65	0.44	2.95	16.3
Colored	4,925	61	133	97,635	518.58	6.42	14.00	28.09	1.24	2.70	19.8
Filipinos	2,601	12	96	34,607	356.55	1.65	13.16	12.96	.46	3.69	13.
Porto Ricans	1,466	2	36	19,164	956.29	1.30	23.48	34.16	.14	2.46	13.1
Total Army enlisted men	142,213	659	4,197	2,328,732	728.80	3.38	21.51	32.61	.46	2.95	16.

[1] Does not include deaths, discharges, and days lost for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

INFLUENCE OF COUNTRY.

WHITE ENLISTED MEN.

Admission.—For white enlisted men, the highest admission rate was in Siberia. This rate, however, may be disregarded, for the troops were withdrawn from that country in March, 1920. Omitting this, the highest rate was for the Philippine Islands (1,134.15), followed in order by China (1,085.15), Europe (790.66), United States (728.69), Panama (703.34), and Hawaii (590.97). The leading causes of admission were: Philippine Islands, dengue (253.37), gonorrhea (103.04), and chancroid (61.53); China, gonorrhea (233.57), chancroid (145.98), and bronchitis (69.74); Europe, bronchitis (101.32), gonorrhea (90.02), and acute tonsillitis (78.26); United States, tonsillitis, acute (77.68), influenza (67.61), and bronchitis (64.57); Panama, gonorrhea (72.07), bronchitis (64.16), and chancroid (56.26); and Hawaii, bronchitis (58.38), tonsillitis (39.72), gonorrhea (37.51).

Deaths.—Disregarding the death rate for troops in Siberia, the highest death rate for white troops for diseases for 1920 cases only, was for China (8.11), followed in the order named by Europe (4.40), United States (3.21), Philippine Islands (2.38), Panama (1.13), and Hawaii (1.00). Including deaths for cases admitted prior to 1920 the more important causes of deaths were: For China, lobar pneumonia (1.62) and tuberculosis (1.62); for Europe, tuberculosis (1.51), influenza (1.18), and measles (0.85); for United States, tuberculosis (1.08), influenza (0.89), and lobar pneumonia (0.55); for Philippine Islands, broncho-pneumonia (0.57), and tuberculosis (0.45); for Panama, five deaths, no two of which were for one cause; and for Hawaii, broncho-pneumonia (0.40) and tuberculosis (0.40).

Discharges for disability.—For 1920 cases only the highest rate for discharges was for the Philippine Islands (25.34), followed in order by the United States (24.24), Hawaii (15.24), Panama (12.43), Europe (11.04), and China (4.87). Including the discharges for cases admitted prior to 1920, the more important causes were: Philippine

Islands, pes planus (4.41), mental deficiency (2.04), and constitutional psychopathic state (1.81); for the United States, tuberculosis (16.37), dementia praecox (3.74), and mental deficiency (2.34); for Hawaii, constitutional psychopathic state (2.21), refractive errors (1.20), and

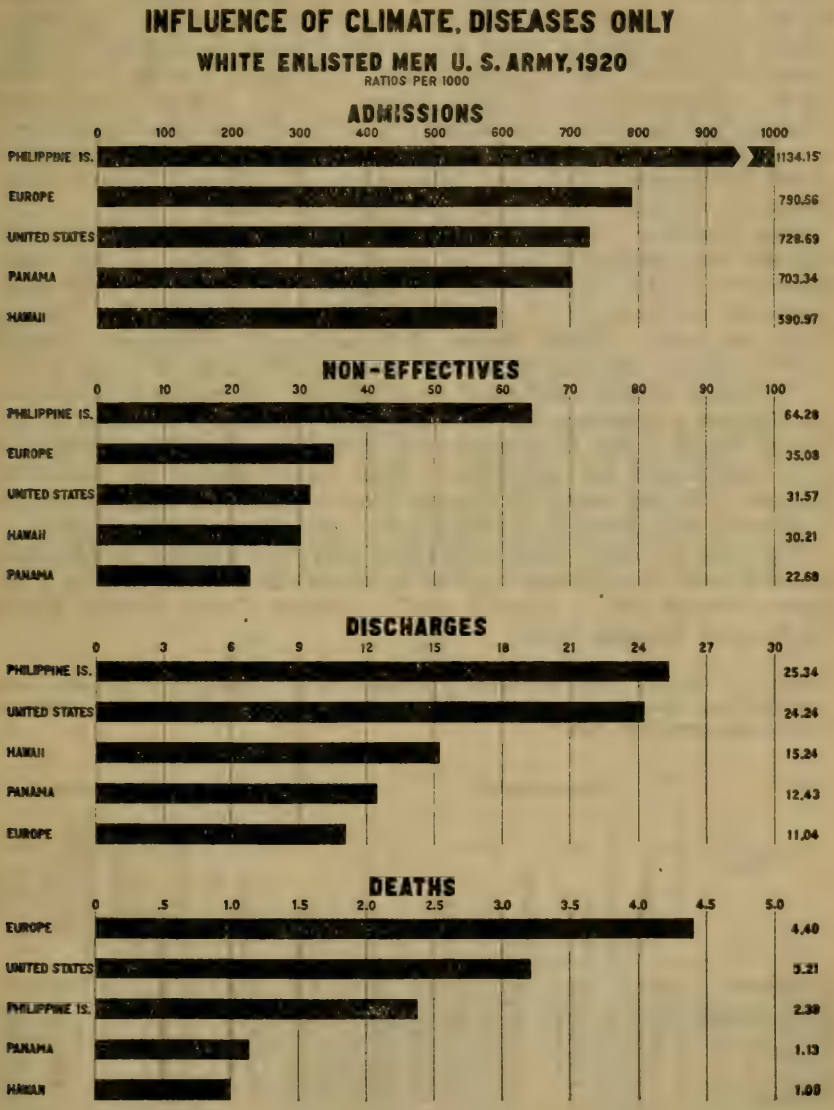

FIG. 15.

mental deficiency and pes planus, each (1.00); for Panama, dementia praecox (2.26), constitutional psychopathic state (1.36), and tuberculosis (1.36); for Europe, tuberculosis (10.12), dementia praecox (2.69), pleurisy, suppurative (2.10); and for China, pes planus (1.62), with seven other discharges, no two of which were for any one cause.

Days lost or noneffective rate.—Excluding the rates for troops in Siberia and considering those for 1920 cases only, the highest noneffective rate for white troops for diseases only, was in China (69.57), followed in order by Philippine Islands (64.28), Europe (35.08), United States (31.57), Hawaii (30.21), and Panama (22.68). Including the days lost for cases admitted prior to 1920, the more important causes for the loss of time were: For China, gonorrhea (28.80), chancroid (10.83), and syphillis (4.65); Philippine Islands, gonorrhea (15.97), chancroid (5.94), and dengue (4.92); Europe, gonorrhea (19.53), syphilis (4.94), and chancroid (3.97); United States, tuberculosis (5.07), gonorrhea (4.10), and influenza (2.98); Hawaii, gonorrhea (4.90), bronchitis (1.90), and tuberculosis (1.14); and Panama, gonorrhea (1.92), malarial fevers (1.48), and bronchitis (1.38).

Case mortality.—Excluding this rate for the troops in Siberia, the highest case mortality rate or percentage of deaths to the cases treated for white enlisted men for diseases only and for 1920 cases only was in China (0.75 per cent), followed in order by, Europe (0.56 per cent), United States (0.44 per cent), Philippine Islands (0.31 per cent), Hawaii (0.17 per cent), and Panama (0.16 per cent).

Percentage of cases discharged for disability.—As was to be expected, the highest percentage for discharges for disability occurred in the United States. For 1920 cases only, 3.33 per cent of all cases treated were discharged for diasbility. This was followed in order by Hawaii (2.58 per cent), Philippine Islands (2.23 per cent), Panama (1.77 per cent), Europe (1.40 per cent), and China (0.45 per cent).

Days lost per case.—For 1920 cases only, the number of days lost for each case treated was highest in China (23.5), followed by Philippine Islands (20.7), Hawaii (18.7), Europe (16.2), United States (15.9), and Panama (11.8).

TABLE 14.—*Diseases (all)—Influence of country on the movement of the sick, white enlisted men, American troops, United States Army, 1920, absolute numbers, ratios per 1,000, and percentage rates.*[1]

Country.	Absolute numbers.				Ratios per 1,000.				Percentage.		
	Admissions.	Deaths.	Discharges.	Days lost.	Admissions.	Deaths.	Discharges.	Noneffectives.	Case mortality.	Per cent. of cases discharged for disability.	Days lost per case.
United States	101,399	446	3,373	1,607,469	728.69	3.21	24.24	31.57	0.44	3.33	15.9
Europe	12,033	67	168	195,386	790.66	4.40	11.04	35.08	.56	1.40	16.2
Philippine Islands	10,027	21	224	207,969	1,134.15	2.38	25.34	64.28	.21	2.23	20.7
Hawaii	2,496	5	76	55,126	590.97	1.00	15.24	30.21	.17	2.58	18.7
Panama	3,113	5	55	36,737	703.34	1.13	12.43	22.68	.16	1.77	11.8
China	1,338	10	6	31,394	1,085.15	8.11	4.87	69.57	.75	.45	23.5
Siberia	1,565	18	10	26,381	1,601.84	18.42	10.24	73.78	1.15	.64	16.9
Transports	800	12	20	16,864	405.06	6.08	10.13	23.33	1.50	2.50	21.1
Total enlisted men (white) U. S. Army	133,221	584	3,932	2,177,326	753.47	3.30	22.24	33.65	.44	2.95	16.3

[1] Does not include deaths, discharges, and days lost for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

INFECTIOUS DISEASES.

INFLUENZA, PNEUMONIAS, AND COMMON (OTHER) RESPIRATORY DISEASES.

During the last two months of the calendar year 1919 the admission and death rates for respiratory diseases had shown a very marked increase for the troops in Europe, with some increase in this admission rate in the United States, though associated with very little rise in the death rate. The increase in the admission rate in Europe was distributed between influenza, pneumonia, and common respiratory diseases, but the increase in the death rate was confined to pneumonia. These combined rates for the troops in Europe rose still higher in January. The admission rate, and the death rate, which had been 549.61 and 2.61 in December, rose in January to 686.39 and 7.84, respectively. For the troops in the United States where there had been comparatively little increase in the admission rate, with scarcely any in the death rate in November and December, there was a very sharp rise in January, the rate being 200.48 in December and 756.15 in January for admissions, while that for deaths in December was 0.25, and in January 10.17.

Comparison of white and colored.—The annual admission rate for respiratory diseases for the colored troops in the United States (145.54) was much lower than that for the white troops in the United States (277.34) or for the white troops in Europe (270.38). The death rate for colored troops in the United States was also lower (0.90) than that for the white troops in the United States (1.63) or in Europe (1.45).

TABLE 15.—*Total respiratory diseases—Admissions and deaths, white and colored enlisted men, United States and Europe, by months, 1920, absolute numbers and ratios per 1,000.*

Month.	Admissions.								Deaths.							
	United States.						Europe.		United States.						Europe.	
	White.		Colored.		Total white and colored.		White.		White.		Colored.		Total white and colored.		White.	
	Numbers.	Ratios.	Numbers.	Ratios.	Numbers.	Ratios.	Numbers.	Ratios.	Numbers.	Ratios.	Numbers.	Ratios.	Numbers.	Ratios.	Numbers.	Ratios.
January	9,218	783.78	224	308.54	9,442	756.15	963	686.39	124	10.54	3	4.13	127	10.17	11	7.84
February	8,103	669.17	231	315.57	8,334	648.91	603	419.92	63	5.20	1	1.37	64	4.98	2	1.39
March	4,934	415.67	128	174.38	5,062	401.62	479	340.92	13	1.10	2	2.72	15	1.19	1	1.42
April	2,588	222.12	83	114.17	2,671	219.44	304	229.43	3	.26	...	...	3	.25	...	...
May	1,783	158.40	64	94.25	1,847	154.74	199	154.86	3	.27	...	...	3	.25	...	...
June	1,159	105.89	35	52.63	1,194	102.84	221	175.26	3	.27	...	...	3	.26	2	1.59
July	1,152	105.14	29	59.18	1,181	103.17	193	159.23	3	.27	...	...	3	.26	...	...
August	1,224	110.18	42	72.04	1,266	108.28	270	236.63	4	.36	...	...	4	.34	1	.88
September	1,189	106.80	38	62.09	1,227	104.47	209	183.98	2	.18	...	...	2	.17	1	1.76
October	1,573	138.24	83	138.80	1,656	138.27	241	204.06	1	.09	1	1.67	2	.17	1	2.54
November	2,203	185.30	98	162.52	2,301	184.20	312	257.43	3	.25	...	...	3	.24	2	1.65
December	3,461	260.27	76	123.58	3,537	254.22	285	233.22	5	.38	...	...	5	.36	1	.82
Not stated	6	.....	.....	.....	6	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	38,593	277.34	1,131	145.54	39,723	270.38	4,282	281.35	227	1.63	7	.90	234	1.59	22	1.45

INFLUENZA.

White troops.—Considering influenza alone, we find that for the white troops in the United States the admission rate in December, 1919, was only 5.05. This rate rose in January, 1920, to 372.93, and it continued high in February, being 320.75, but after this month it declined rapidly. For the enlisted men in Europe where only the white troops were serving, the December rate was 90.08

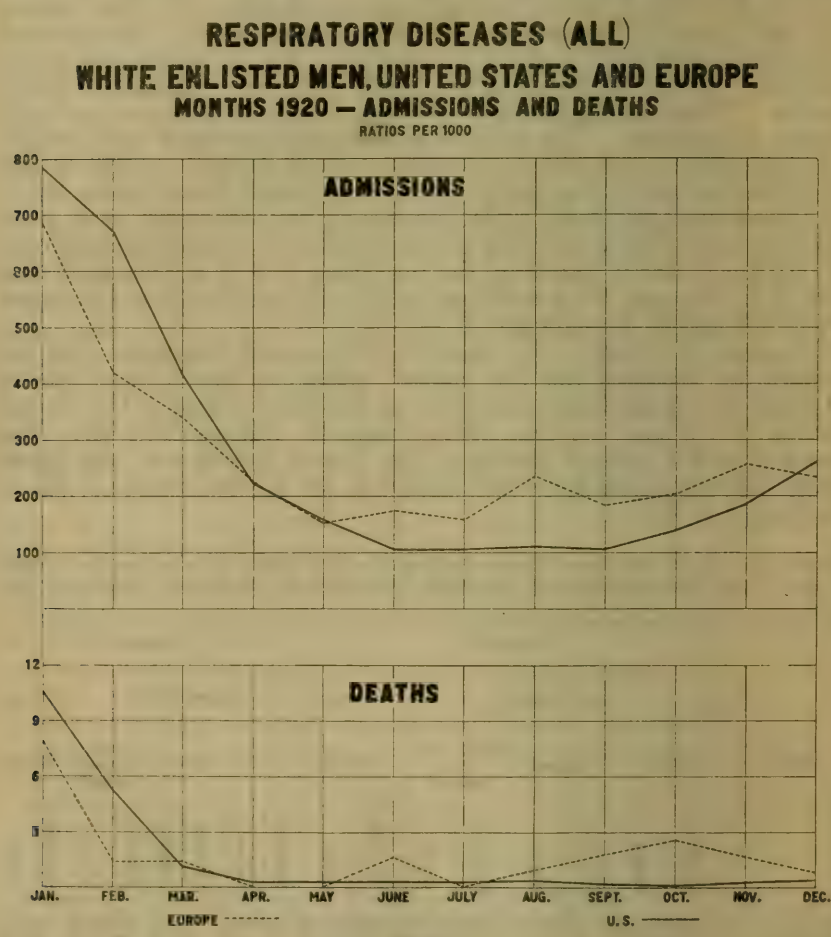

FIG. 16.

and the January 288.67. There was a much greater decline for these troops in Europe in February than there was for the white troops in the United States, and after this month the admission rate declined rapidly, but during the year did not reach the same low level as did that for the troops in the United States. The death rate which in December for the white troops in the United States, was zero, rose in January (see Table 32) to 6.55, and like the admission rate, the death rate continued high in February (3.47), but after this month it also declined rapidly.

Colored troops.—For the colored troops in the United States the admission rate, which was 1.34 in December, showed a rise in January, 1920, to 198.35 and continued to rise in February to 233.61, but after this month it declined rapidly. There had been no deaths from this disease for these troops in December, but in January there were two (see Table 35).

Comparison of white and colored.—The annual admission rate for the white troops in the United States (67.61) was higher than that for the colored (44.70), which was also lower than that for the white troops in Europe (51.91), which difference was probably to be accounted for by the number of white recruits enlisting during the epidemic period.

Decade rates.—An examination of Table 16 shows the comparison for a decade, by countries, for white and colored troops. It will be noted that for 1916–1920 the rates in the United States were much higher than the corresponding ones in the tropical countries, but that for the other years in the decade they were lower than those in Panama and also lower than those in Hawaii in 1912, 1913, and 1914. It will also be noted that for the white and colored troops in the United States the annual rate for 1920 was higher than that for any other year in the decade, with the exception of 1918, but that for Hawaii or Panama it was lower than for any other year, and also lower in the Philippine Islands than that for 1919 and 1920.

TABLE 16.—*Influenza (all)—Admissions and deaths, white and negro enlisted men in various countries, 1911–1920, ratios per 1,000.*

Year.	Admissions.						Deaths.					
	White.				Negro.		White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	22.29	0.32	6.45	.....	4.43	.....	.....	.....	.....	.....	.....	.....
1912	17.10	2.18	38.51	37.52	6.43	12.58	.....	.....	.....	.....	.....	.....
1913	15.30	1.71	25.97	32.62	10.02	.....	.....	.....	.....	.....	.....	.....
1914	11.57	2.75	28.95	31.34	18.60	.....	.....	.....	.....	.....	.....	.....
1915	[1] 42.02	2.67	21.17	47.37	43.05	7.46	0.06	.....	.....	.....	.....	.....
1916	40.31	11.38	14.70	38.59	36.19	.....	[1] .01	.....	.....	.....	.....	.....
1917	58.44	3.09	24.48	44.75	27.83	11.29	.01	.....	.....	.....	.....	.....
1918	361.43	167.31	129.28	336.95	354.02	266.83	11.73	0.18	0.36	1.09	15.19	.....
1919	49.71	15.20	32.49	30.80	37.17	.....	1.90	.26	.32	.....	1.11	.....
1920 [2]	67.61	11.88	3.81	4.07	44.70	.58	.89	.....	.20	.45	.64	.....

[1] Includes National Guard officers.
[2] Includes deaths that occurred in 1920 for cases admitted prior to 1920.

PNEUMONIAS.

White troops.—For the pneumonias (all forms) the admission rate for the white troops in the United States in December, 1919, was 2.30. This rate rose in January to 13.60, but declined in February to 8.51 and in March to 5.39. After this month the decline was continuous until the rate of 1.08 was reached in September. For

the troops in Europe the admission rate in December had shown a marked increase over that for November, it being 14.36 for December, as compared with 7.61 for November, but it declined in January to 12.12 and still further in February to 9.05. After this month the rate continued to decline until June, when there was a sharp rise to 7.14. There was another very sharp rise in September and November to 10.56 and 10.73, respectively.

The death rate for white troops in the United States in December, 1919, had been only 0.27, but this rose in January to 4.00. It declined in February to 1.73, and in March to 0.76, and after this month the rate was low.

Colored troops.—For the colored troops in the United States the admission rate in December had shown a very material increase over that for November, being 12.08, as compared with 5.46. This rate declined in January to 8.26 with a further decline in February to 2.73, but rose in March to 4.09. After this month there was a gradual decline, with the exception of a rise in July to 4.08. One death from pneumonia occurred among these troops in January and one in February.

Comparison of white and colored troops.—The annual admission rate for colored troops in the United States for pneumonias was 3.48, which was lower than that for the white troops either in the United States (4.18) or in Europe (7.42).

Decade rates.—The decade table shows that for the year 1920 the admission rate for white troops in the Philippines was higher than that for the white troops in the United States. This is quite unusual, but probably was due to a greater number of influenza cases being charged to pneumonia in the Philippines.

It will be noted that for the white troops in the United States, and also for the colored that the rate which had started to increase in 1916 continued to increase in 1917, to reach the high point in 1918, with a noticeable decline in 1919, which was continued in 1920.

Types of organisms.—The types of organisms reported for cases of primary and secondary pneumonia, including both the broncho and lobar types, are shown in the following tabulation:

	Cases.	Deaths.
Pneumococcus, type 1	13	.....
Pneumococcus, type 2	23	6
Pneumococcus, type 3	15	5
Pneumococcus, type 4	169	17
Pneumococcus, type not specified	98	8
Streptococcus, viridans	1	.....
Streptococcus, other types	21	4
Streptococcus, unclassified	34	10
Staphylococcus, pyogenes aureus	1	1
Staphylococcus, unclassified	1	.....

TABLE 17.—*Pneumonias (all).—Admissions and deaths, white and negro enlisted men in various countries, 1911–1920, ratios per 1,000.*

Year.	Admissions.						Deaths.					
	White.				Negro.		White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	2.32	1.20	1.99	.....	2.38	.....	0.42	0.16	0.50	.....	0.34	.....
1912	2.84	1.45	.59	.....	3.21	3.70	.26	.....	.....	.....	.40	.....
1913	2.57	1.28	1.18	1.25	5.31	2.76	.36	.10	.....	.....	.59	0.55
1914	3.07	1.56	1.12	.....	5.47	1.06	.24	.....	.32	.....	1.09	.....
1915	3.38	2.00	1.35	.87	4.92	5.22	.46	.....	.14	.....	1.23	.....
1916	[1] 5.49	.94	.60	.56	9.65	.....	.42	.18	.15	.....	.59	.....
1917	14.06	1.06	3.44	.86	61.22	3.32	1.58	.11	.11	0.12	7.07	.66
1918	21.68	4.73	4.44	1.08	78.80	1.19	5.36	1.23	.....	.24	17.15	1.19
1919	7.31	4.38	5.74	.20	29.33	2.60	1.73	.78	.64	.....	4.14	1.30
1920 [2]	4.19	4.63	2.81	1.81	3.48	1.16	.87	.68	.40	.23	.39	1.16

[1] Includes National Guard officers.
[2] Includes deaths that occurred in 1920 for cases admitted prior to 1920.

COMMON RESPIRATORY DISEASES.

White troops.—The monthly admission rates for this class of diseases, including rhinitis, bronchitis, tonsillitis, pharyngitis, laryngitis, and pleurisies, all of the acute type, which had been 197.86 in December, 1919, rose in January to 397.25, which was higher than the rate for influenza. It continued high for February (339.91), with another increase in the rate for March (345.60), in which month there was a very marked decline in the rate for influenza. After this month the rate declined rapidly. For the troops in Europe the admission rate for this class of disease had shown a very marked increase in December, 1919, over that for November, being 439.30 in December, as compared with 258.08 for November. There was a considerable decline in the rate for January (385.60), with a further decline in February to 314.76. This rate continued to decline after February. The annual rate for the white troops in Europe for this class of disease was 222.02, and in the United States 205.55.

Colored troops.—For colored troops in the United States the rate for this class of disease in December was 115.44 and in November 69.44. The rate declined in January to 101.93, in February to 79.23, in which month the influenza rate for them had increased, but in March this rate showed an increase, while the influenza rate showed a decrease.

Comparison of white and colored troops.—The annual admission rate for the colored troops for this class of disease (97.50) was much lower than that for either the white troops in the United States (205.55) or in Europe (222.02).

TOTAL RESPIRATORY DISEASES.

Figure 17 shows the comparative trend of the rates for the total respiratory diseases for enlisted men, United States Army, including both white and colored, that were serving in the United States and

Europe from April, 1917, through December, 1920. The points that are of special interest at this time are: (*a*) The height reached by the admission rate in Europe in December, 1919, and in January, 1920, and in the United States in January; and (*b*) the height reached by the death rate in Europe in December, 1919, and in January, 1920, and in the United States in January, 1920. The admission rate in the United States in January, 1920, reached a higher level than it did at any other time between April, 1917, and December, 1920, with the exception of the height reached during the fall epidemic of 1918, and in Europe it rose to a higher point than it reached even during the fall epidemic of 1918. The death rate in the United States in

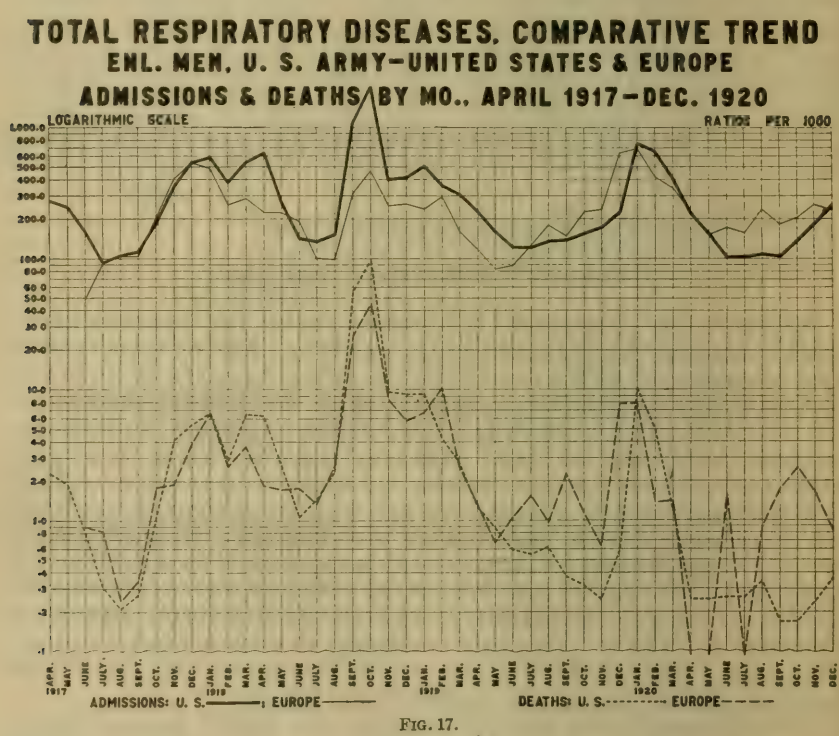
TOTAL RESPIRATORY DISEASES. COMPARATIVE TREND
ENL. MEN, U. S. ARMY—UNITED STATES & EUROPE
ADMISSIONS & DEATHS BY MO., APRIL 1917—DEC. 1920
LOGARITHMIC SCALE
RATIOS PER 1000
ADMISSIONS: U. S.——; EUROPE——
DEATHS: U. S.---------- EUROPE- - - -

FIG. 17.

January, 1920, like the admission rate, reached a higher point than was attained at any time during the period, other than during the fall epidemic of 1918, and the same was true of this rate in Europe for December, 1919, and January, 1920.

EXTRACTS, REPORTS.

The following extracts from corps areas and department surgeons reports are of interest:

Second Corps Area.—Camp Dix, N. J.—The influenza epidemic began on January 9, 1920. The epidemic was mild, but two deaths occurred as the result of complicating pneumonia. A total of 134 cases of influenza developed.

A pneumonia epidemic followed the influenza. The first case appeared January 17, 1920. It reached its height in the following month and then rapidly subsided. Thirty-six cases occurred. Eight deaths resulted during the epidemic.

Henry Barracks, P. R.—In May, 1920, an epidemic of influenza made its appearance at the post. There were 41 cases, with 1 case of pneumonia, but with no deaths. Generally speaking, the cases were mild in character.

Fort Jay, N. Y.—No epidemic of any disease occurred other than the epidemic of respiratory affections, largely influenza, in January and February. Something over 125 cases of these diseases occurred within a period of three or four weeks. A large proportion was undoubtedly influenza, generally of mild grade; nevertheless 7 cases of pneumonia, with 2 deaths occurred during the epidemic.

Madison Barracks, N. Y.—An epidemic of influenza occurred, beginning the latter part of January and lasting about six weeks. Thirty-eight cases were admitted to sick report, with only 1 case of pneumonia (bronchial type) following. No deaths occurred, although two retired soldiers died in hospital from complications following influenza.

Fort Ontario, N. Y.—During the month of February, 1920, 4 or 5 cases of suspected influenza were admitted. Immediate steps were taken to combat this disease. The results were extremely good in that only 2 more cases occurred.

Fort Porter, N. Y.—Twenty-eight cases of influenza occurred in the enlisted strength of the command, distributed as follows: Companies A, B, C, and D, Twenty-second Infantry Detachment, Quartermaster Corps. The first case appeared on January 28, 1920, when 5 cases were detected at the morning sick call. With the exception of 1 case, all were treated in the hospital. The one exception was a married noncommissioned officer living on the post with his family. All cases progressed favorably without complications, with the exception of 2 cases, which developed bronchopneumonia.

Post of San Juan, P. R.—Influenza was present in epidemic form (mild) during February and March, 1920. One case of pneumonia developed, resulting in one death.

Camp Upton, N. Y.—The influenza epidemic first appeared in the latter half of January. Up to that time many of the wards of the hospital formerly in use had been closed, but with the onset of the epidemic these wards were soon reopened to make room for patients, who were rapidly being admitted. This epidemic did not have the severity of that of 1918 or resemble it to any large extent. It was interesting to note that 75 per cent of the cases admitted to the hospital gave a history of having had a previous attack during the 1918 epidemic.

Laboratory studies at the hospital showed the type of organisms isolated during the epidemic as follows:

Streptococcus hemolyticus	40 per cent.
Streptococcus viridans	30 per cent.
Bacillus influenza	30 per cent.

About 10 per cent of the cases of influenza developed a secondary pneumonia of varying severity. Owing to the limited number of mice at the laboratory, it was impossible to type all these cases of pneumonia, but of those typed 75 per cent were caused by the pneumococcus type "A" and 25 per cent by the streptococcus hemolyticus. In view of the history of previous attacks of influenza by the patients admitted, the opinion was expressed that one attack of influenza predisposes to a succeeding attack rather than confers an immunity.

An important factor in this epidemic was the susceptibility of the enlisted men of the recruit educational center, in which about 95 per cent of all cases occurred. These men were young and many of them came from isolated communities and had not previously been exposed to these diseases.

The first genuine case of influenza appeared January 24, 1920. Following this there was a rapid increase so that the total to midnight January 28, 1920, had risen to 153. From then on cases continued to occur until February 15, 1920, when the epidemic subsided. The total number of cases was 346 and the total number of cases of pneumonia 41. There were proportionately fewer cases of pneumonia than occurred in 1918.

After the close of the epidemic proper, the sequelæ of the disease, namely: empyema, otitis media, and mastoiditis, occupied the attention of the medical officers for several months. The empyema cases warrant special mention, since they were particularly severe, the patients rapidly becoming very septic, resembling in this respect the epidemic of 1918, although the onset of them was not so insidious and they could be diagnosed earlier.

Fifth Corps area.—An epidemic of influenza developed at Camp Zachary Taylor, Ky., about the middle of January, 1920. About that time there were a few admissions for a disease characterized by chills, pains in the back and legs, a rise in temperature, and a cough with considerable exudation into the bronchi and smaller bronchioles.

Up to January 21 there were 97 of these cases admitted. On that date the definite diagnosis of influenza was made and subsequent admissions so classified. Altogether there were 450 cases of influenza with 135 cases of post-influenzal pneumonia.

Seventh Corps area.—The prevalence of influenza caused, during the first two months of the year, a number of admissions and it was followed by some cases of pneumonia; outside of this comparatively short epidemic, which was not accompanied by the high mortality shown in 1918, the general health of the corps has been excellent.

Camp Dodge, Iowa.—An epidemic of influenza occurred at this camp in January, February, and March, 1920. There were 161 admissions with 4 cases of post-influenzal pneumonia and 2 deaths. The disease was scattered throughout the entire command, with the exception of the school for cooks and bakers, an organization composed largely of old-service men.

Camp Funston, Kans.—The influenza epidemic made its first appearance at this camp on January 24, 1920. The admissions numbered about 15 a day. On February 10 there were 162 cases of influenza under treatment in hospital. From that date the discharges exceeded the admissions for some time, and on February 29 there were only 39 cases remaining in hospital. Fifty-two new cases were, however, admitted in March, 1920. The disease gradually subsided, and at the end of the month there was only 1 case remaining under treatment. Six cases of broncho-pneumonia developed as complications of the disease, but there were no deaths.

Eighth Corps area.—This disease reappeared in mild epidemic form in January and February, 1920, but with the measures adopted to combat it, and the immunity existing in so many persons from former epidemics, the disease was of milder form and shorter duration. The cases of influenza, pneumonia, and deaths occurring were as follows:

	January.	February.	Total.
Influenza	698	951	1,649
Pneumonia	94	175	269
Deaths	9	18	27

After the 20th of February the cases dwindled to almost none and the epidemic was considered at an end.

American Forces in Germany.—This disease was constantly present in the command and appeared in epidemic form during January and February. The most explosive outbreak occurred in the first batallion of the Eighth Infantry, when there were 103 cases in six days. In spite of precautionary measures taken to prevent the spread of the disease, it soon became epidemic throughout the command. Fortunately, the majority of the cases were mild in character. More cases occurred among troops that were quartered in barracks than among those billeted, since a greater number of men were brought into close contact in the squad rooms. Four cases of encephalitis, following influenza, appeared during this epidemic. Oddly enough no epidemic was present among the civil population in Coblenz at that time.

Hawaiian Department.—During the early months of 1920 a moderate epidemic of influenza occurred in the Hawaiian Islands. As is usually the case in these epidemics, some cases of other infections were classed under this heading. This epidemic made no appreciable impression on the troops on Oahu. During its prevalence men were advised to keep away from "movies" and other crowded places, and all suspicious cases were isolated.

Transport Madawaska.—The only infection of any moment was introduced by the *U. S. A. T. Madawaska*, which reached Honolulu January 24, having previously radioed "acute respiratory infection on board."

Seven ambulances met the boat on the morning of January 24th and 59 patients were transported to the department hospital.

The troops landed for duty in department, troops en route to the Philippine Department, and crew were isolated, exercised, and given recreation on shore, but were isolated from other soldiers and from civilians. Twenty additional cases of influenza from among them were subsequently admitted to the Triplers Hospital.

The investigation showed that a respiratory infection with symptoms of bronchitis developed soon after sailing, and that this spread rapidly, a number of enlisted men and civilians, in addition to those reported above, having been treated and recorded before arrival here. Thirty cases were reported as "bronchitis," and soon developed broncho-pneumonia, of which number, 10 were seriously sick, and 2 enlisted men died before the transport reached Honolulu. Of the 59 transferred to the department hos-

pital 4 (2 marines and 2 civilians) died from broncho-pneumonia, making a total of 6 deaths following the infection on the *Madawaska*.

The transport was overcrowded and during the first two days at least the ventilation was reported as very defective. To these two defects, especially to the very close contact resulting from overcrowding, can be ascribed the rapid spread of the primary infection and the secondary broncho-pneumonia.

Many of the primary infections appear to have been bronchitis, but a number suffered from symptoms resembling what had been called during the past two weeks "influenza." The primary infection was not dangerous, but the secondary broncho-pneumonia was of the same rapidly fatal type that prevailed so extensively in the United States in 1918 and 1919, the patients often dying as a result of the overwhelming toxæmia. The infection which appeared after sailing was unexpected and was as unavoidable as were similar infections developing on transports sailing to Europe late in 1918.

VENEREAL DISEASE.

The annual admission rate for venereal disease for white troops in the United States was lower than that for any year during the decade. The rate was highest for the white troops in China (421.73). The rates for whites in the other countries stood in the order named: Siberia (299.89) Philippine Islands (188.10), Panama (138.95), and United States (65.17). For the colored troops in the United States the rate (96.86) was lower than any rate for them since 1915. It was much lower than the rate for them in the Philippine Islands (160.41). This latter rate was, however, lower than any corresponding rate for them during the decade.

The combined rate for the white troops in all countries was 85.55, for the colored 108.46, for the Porto Ricans 99.80, and for the Filipinos 20.29. Thus as is customary, the rate for these diseases for the Filipino native troops was the lowest. For white troops in the United States in December, 1919, it was 84.27, and in December, 1920, 65.05. It is consequently apparent that a material reduction had occurred in 12 months' time. This reduction is especially gratifying in view of the fact that there were a great many more recruits enlisted in December, 1920, than there had been in December, 1919, the number enlisted in December, 1919, being 9,993, and in December, 1920, 24,706. The reduction in the rate for white troops in Europe was also gratifying, even though the rate there remained abnormally high throughout the year. In December, 1919, this rate had been 298.30, and in December, 1920, it was 144.84. It is true that the annual rate for 1920 for these troops in Europe (165.26) was much higher than that for 1919 (44.41). It will be recalled, however, that during the first six months of 1919 the last of the troops belonging to the war Army were withdrawn and replaced by volunteer recruits. An examination of the rates in Table 86, page 183, Report of 1920, shows that the proportional number of cases during the last six months (Volunteer Army), far exceeded the number in the first six months (war Army).

On the other hand, while the annual rate for the colored troops in the United States (96.86) was much below that for the year 1919 (290.05), yet the monthly rates during the last two months of 1920 were not so satisfactory as the rates for the corresponding months of 1919.

In the Philippine Islands, the monthly rate for the white troops showed a material decrease during the year, while that for the colored troops fluctuated from month to month, but was practically at the

same level at the end of the year, as it had been at the beginning. Tables 19 to 22 show the rates for the decade by countries for white and colored troops for the total venereal diseases and for the individual diseases, while Tables 18, 23, 32, 33, and 34 show the monthly admission rate for white and colored troops in the United States and Europe, and the Philippine Islands.

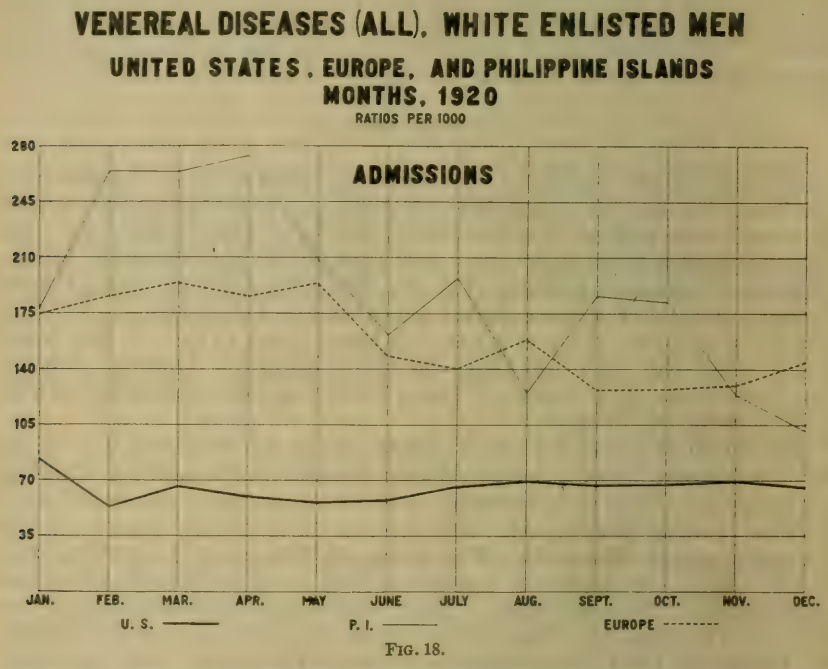

FIG. 18.

TABLE 18.—*Venereal diseases (all)—Admissions, United States and Europe, by months, white and colored enlisted men, 1920; absolute numbers and ratios per 1,000.*

Month.	United States.						Europe.	
	White.		Colored.		Total.		White.	
	Absolute numbers.	Ratios.	Absolute numbers.	Ratios.	Absolute numbers.	Ratios.	Absolute numbers.	Ratios.
January	976	82.99	86	118.46	1,062	85.06	345	174.62
February	640	52.85	58	79.23	698	54.35	267	185.94
March	784	66.05	46	62.67	830	65.85	272	193.59
April	685	59.85	29	39.89	714	58.66	246	185.66
May	630	55.97	31	45.65	661	55.38	249	193.77
June	629	57.47	33	49.62	662	57.02	187	148.29
July	721	65.81	47	95.92	768	67.10	170	140.26
August	771	69.40	100	171.53	871	74.49	181	158.63
September	741	66.56	104	169.94	845	71.94	144	126.76
October	763	67.05	68	113.71	831	69.39	150	127.01
November	822	69.14	70	116.09	892	71.41	157	129.54
December	865	65.05	78	126.83	943	67.78	177	144.84
Not stated	11	.....	2	.....	13	.....	70	.....
Total	9,038	65.17	752	96.86	9,790	66.64	2,515	165.26

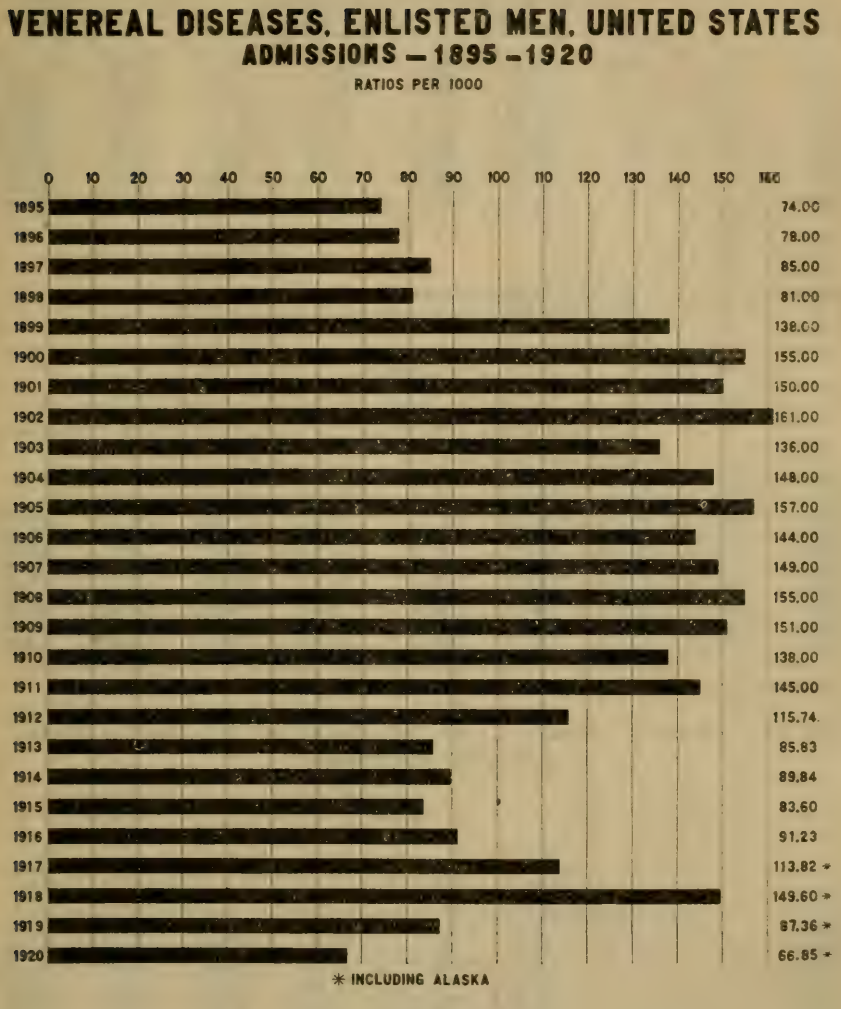
VENEREAL DISEASES, ENLISTED MEN, UNITED STATES
ADMISSIONS — 1895 – 1920
RATIOS PER 1000
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160
1895 74.00
1896 78.00
1897 85.00
1898 81.00
1899 138.00
1900 155.00
1901 150.00
1902 161.00
1903 136.00
1904 148.00
1905 157.00
1906 144.00
1907 149.00
1908 155.00
1909 151.00
1910 138.00
1911 145.00
1912 115.74
1913 85.83
1914 89.84
1915 83.60
1916 91.23
1917 113.82 *
1918 149.60 *
1919 87.36 *
1920 66.85 *
* INCLUDING ALASKA

FIG. 19.

TABLE 19.—*Venereal diseases (all)—Admissions, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippine Islands.	Hawaii.	Panama.	United States.	Philippine Islands.
1911	165.03	305.12	175.27	117.65	142.85	.....
1912	116.24	215.43	122.93	68.56	104.50	524.06
1913	85.23	140.77	80.87	196.99	106.13	194.37
1914	90.99	174.79	60.14	135.82	52.52	233.76
1915	84.08	177.08	92.56	136.51	71.75	258.76
1916	[1] 85.61	155.91	87.88	115.62	156.82	246.56
1917	109.08	193.21	54.76	123.78	310.50	370.52
1918	101.88	159.07	44.96	67.22	689.12	169.15
1919	67.78	156.36	57.65	83.38	290.05	208.44
1920	65.17	188.10	47.14	138.95	96.86	160.41

[1] Includes National Guard officers.

TABLE 20.—*Syphilis (all)—Admissions, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippine Islands.	Hawaii.	Panama.	United States.	Philippine Islands.
1911	45.33	78.05	50.65	39.22	25.91	.....
1912	25.84	45.07	40.88	12.94	19.69	23.69
1913	20.98	32.31	21.45	25.09	21.23	37.55
1914	18.86	47.28	16.00	17.91	7.66	48.46
1915	17.44	37.93	23.85	15.91	12.30	62.64
1916	[1] 13.84	36.48	18.00	18.94	45.84	28.57
1917	14.22	56.01	8.27	18.00	54.68	41.17
1918	18.83	26.48	6.95	16.66	129.90	38.12
1919	16.63	17.52	9.24	7.80	70.39	14.29
1920	12.13	23.53	4.21	10.62	14.94	8.08

[1] Includes National Guard officers.

TABLE 21.—*Gonorrhea—Admissions, white and negro enlisted men in various countries, 1911–1920, ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippine Islands.	Hawaii.	Panama.	United States.	Philippine Islands.
1911	94.48	138.59	108.74	44.12	95.12	.....
1912	69.87	114.30	55.69	23.29	74.36	341.23
1913	49.14	83.71	50.77	79.05	60.14	104.92
1914	52.04	80.11	37.11	73.13	28.99	95.85
1915	50.91	100.35	57.83	68.17	41.82	164.05
1916	[1] 55.11	83.78	45.74	60.66	92.88	186.24
1917	82.47	89.09	33.93	66.08	203.04	125.50
1918	78.07	69.10	36.23	28.72	514.68	61.94
1919	42.37	73.16	45.55	41.79	162.23	135.72
1920	43.99	103.04	37.51	72.07	53.70	69.82

[1] Includes National Guard officers.

TABLE 22.—*Chancroid—Admissions, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippine Islands.	Hawaii.	Panama.	United States.	Philippine Islands.
1911	25.22	88.48	15.89	34.31	21.82	.....
1912	20.52	56.06	26.36	32.34	10.45	159.14
1913	15.11	24.74	8.66	92.85	24.76	51.90
1914	20.09	47.40	7.04	44.78	15.86	89.46
1915	15.73	38.79	10.88	52.44	17.63	32.06
1916	[1] 16.66	35.64	24.15	36.02	18.09	31.75
1917	12.39	48.11	12.56	39.70	52.78	203.85
1918	4.98	63.49	1.78	21.84	44.54	69.09
1919	8.78	65.70	2.87	33.79	57.44	58.44
1920	9.05	61.53	5.42	56.26	28.21	82.51

[1] Includes National Guard officers.

TABLE 23.—*Venereal diseases (all)—Admissions, Philippine Islands, by months, white and colored enlisted men, 1920; absolute numbers and ratios per 1,000.*

Month.	Absolute numbers.			Ratios per 1,000.		
	White.	Colored.	Total.	White.	Colored.	Total.
January	51	34	85	177.70	228.19	194.95
February	110	25	135	263.79	155.28	233.56
March	174	27	201	263.24	162.65	243.34
April	265	33	298	273.48	206.25	263.95
May	196	26	222	208.29	171.05	203.11
June	130	30	160	161.29	208.33	168.42
July	166	19	185	196.45	138.68	188.39
August	106	18	124	124.85	131.38	125.89
September	150	9	159	185.64	66.17	168.43
October	141	15	156	181.93	111.94	171.62
November	94	12	106	123.52	95.24	119.50
December	73	30	103	100.97	229.01	120.61
No month	7	.....	7	.....	.....	.....
Total	1,663	278	1,941	188.10	160.42	183.56

EXTRACTS, REPORTS.

The following extracts from corps area and department surgeon reports are of interest:

Third Corps area.—The venereal question is of paramount importance at those posts near the littoral of Hampton Roads by reason of the cosmopolitan female population of Newport News and the large number of negresses engaged in clandestine prostitution. The distance a man has to travel to obtain prophylaxis is a determining factor, and to offset this an effort is being made to establish an early treatment station in Newport News. As the time factor is of importance in the efficiency of prophylaxis the mandatory subjection of an individual to it upon return from pass irrespective of the time absent does not always result in obtaining the desired results.

Fifth Corps area.—It was noticed at different stations that relatively few prophylactic treatments are being taken, in spite of repeated lectures, exhibitions of antivenereal moving pictures, and other educational procedures. This condition is believed to be due to the generosity in granting all-night and week-end passes; to the lowering of the standard of mentality for accepted recruits during the drive for enlistments; and to the lack of uniform enforcement of the regulations relative to punishment for this offense.

Sixth Corps area.—Camp Grant, Ill.—The venereal rate has been exceptionally low, and this despite the fact that many "new" cases have been recorded for which this garrison is not responsible. Several cases, particularly syphilis, were contracted overseas, and were not detected until their arrival at this post. Others were contracted at other stations and developed while en route to Camp Grant.

The large number of recruiting parties constantly out from this post, and most often in small towns where no prophylactic stations are established, accounts for 75 per cent of the cases contracted in this command. Reenlistments, furloughs, and absences without leave account for many more. Less than 10 per cent were contracted in the vicinity of Camp Grant and only 2 per cent followed the use of prophylaxis.

Seventh Corps area.—The usual phenomena is noted of the highest incidence after the greatest number of exposures; the rates for venereal disease are highest at stations in or near cities. Apparently the maximum amount of prevention is not afforded by the present system of prophylaxis. The difficulty is with the men who can not take prophylactic measure within two to four hours after exposure. Men on all-night or 24-hour passes, or furloughs, and applicants or recruits sent from recruiting stations to posts or depots are not now protected. While the superiority of the present system of established stations for prophylaxis over the portable packet has been demonstrated, the former does not meet all requirements in those instances where treatment at a station is not practicable within the time limit that it is effective. There remains the need of some measure to fill this gap in the line of defense. It is possible that the issue of "Venereal packets" under these circumstances would assist in completing the necessary line of protection from the time the applicant or recruit leaves a military station until his return.

Further efforts are also necessary to develop and maintain in the Army a public opinion which will exact from the soldier a constantly nonvenereal status. This can best be accomplished by the personal interest of the detachment and company commander. When venereal diseases are unduly prevalent in a command the military commander should be called upon to investigate and report and should be impressed by higher authority with his responsibility in the premises. Too often this matter is left to the medical officer as his concern only, when in reality full compliance with existing orders was not insisted upon. As measured by existing standards, the amount of venereal disease has not been excessive.

Eighth Corps area.—The average rate for the year may be looked upon practically as a minimum, evidencing the maximum results obtainable from present regulations and measures adopted for its control, when the average type of peace-time recruit is considered.

Trial for contracting of venereal disease regardless of the use of prophylactic is recommended as a measure to still further reduce venereal incidence, and constituting the only additional step apparently available in a maximum effort for the reduction of this disease.

The direct admonition of commanding officers by the corps area commander has continued to be a valuable means of keeping these officers alert as to their responsibilities in this regard.

Treatment on duty status has been urged upon medical officers in case of syphilis when not in the infectious stage and of gonorrhoea and chancroid, when not complicated.

Prophylactic station.—Some of the defects observed during sanitary inspections at some stations in this area were:

1. Practice of merely making out Form 77, M. D., and telling the applicant to "help himself" in the station, i. e., with no personal supervision on the part of the attendant in charge and much less actual administration by him of the treatment.
2. Failure to *first* examine the applicant to determine the existence of already existing venereal disease.
3. Failure to provide or require the washing with soap and warm water.
4. Failure to require the use of the bichloride wash.
5. Failure to use freshly prepared protargol solution.
6. Failure to establish the identity of the applicant.
7. Failure to maintain the station in such a state of illumination, cleanliness, and order, and the appliances and material in such a state of surgical cleanliness as to inspire in the minds of soldiers a proper respect for and confidence in the procedure.
8. Failure to enter on service records the fact of instruction in these matters as required by G. O. 135, W. D., 1920.
9. The impression has become prevalent at some stations that the urethral injection and the calomel ointment inunction are all that are necessary.

These defects are being corrected, and the attention of all medical officers called thereto in circular from this office.

Ninth Corps area.—Reports received show that 17,364 days were lost from duty on account of venereal diseases and that 522 new cases of gonorrhea, 75 of chancroid, and 61 of syphilis developed. During the same period 4,875 prophylactic treatments are recorded as having been administered.

The methods prescribed by G. O. 135, W. D., 1919, are generally carried out at all stations. A specially instructed enlisted man of the Medical Department has been sent with picture films and stereomotograph to the majority of posts to assist the company and medical officers in giving the required instructions. In addition to those maintained at hospitals, prophylactic stations are operated in the larger cities adjacent to camps and stations, such as San Francisco, San Diego, Portland, Tacoma, Seattle, and Salt Lake City.

American Forces in Germany.—Prevalence of venereal diseases.—The control of these diseases has continued to present the most serious problem of disease prevention. The annual rate for 1920 for these forces was 165.26 per 1,000. This rate has remained consistently higher than that for the United States Army as a whole. The average weekly venereal rate from August 20, 1919 (when restrictions against fraternization with the enemy were relaxed), until the end of the year 1919—a period of 20 weeks—was 203.90. The average monthly venereal rate for the first six months of 1920 was 180.66 and for the last six months 137.81. It is, therefore, apparent that there has been a constant diminution of venereal disease even though fraternization has steadily increased. There are certain contributory factors which should be considered in connection with the relatively high venereal incidence rate for the American Forces in Germany. These are:

1. These forces were at first composed largely of recruits, many of whom had been attracted by the opportunity for securing alcohol in this area.
2. Restrictions against fraternization with the enemy were relaxed at an early date.
3. A large number of prostitutes remained after the departure of the Third Army.
4. There has been an influx into this area of prostitutes attracted by the large amount of money in the possession of American soldiers.
5. Alcoholism is generally associated with an increased venereal rate. While soldiers are only authorized to drink light wines and beer, the illicit traffic in brandy can not be prevented in a country which does not forbid the sale of alcohol in any form to its own people. The use of alcohol has unquestionably increased the occurrence of venereal disease among our forces.
6. American soldiers are practicably limited in their social contact with women to Germans of the lower classes. The latter have been living for the past six years in a country which has been overrun with soldiers. During the war German soldiers going and coming from the fronts passed through the Rhineland, leaving a trail of venereal disease behind them. Vagrant German women who have been arrested and examined for venereal disease show a high percentage of infections.
7. The low value of the mark in comparison with the dollar has provided the American soldier with a large amount of money. The soldiers of our Allies are unable to compete with him when he bids for his amusement.

Prevalence of venereal disease in the British and French Armies of Occupation.—Accurate statistics concerning the prevalence of venereal disease among the British and French troops in the occupied area are not available, since all of them are not hospitalized nor recorded.

British troops are given physical inspections at frequent intervals, and prophylactic stations are maintained. While men are urged to take prophylaxis they are not court-martialed for failure to do so nor do they forfeit pay while absent from duty because of venereal disease.

French troops are inspected once a month for evidence of venereal disease and also all men are inspected upon departure for and return from leaves. Numerous prophylactic stations are maintained, one in every barracks or compound, where adequate facilities are provided. At these stations prophylaxis is taken under the supervision of an attendant. Failure to take prophylaxis is not a punishable military offense, nor is pay forfeited while absent from duty because of venereal disease. All cases of venereal disease are not hospitalized nor recorded.

Convalescent hospital for treatment of venereal disease.—The convalescent hospital was opened in September, 1919, and has been functioning for a period of 16 months as an adjunct to the station hospital for the quarantine and treatment of convalescing venereal patients. However, it should not be considered merely as an overflow ward of the station hospital, for the interests and purposes of the institution have a far wider scope. These may be briefly enumerated as follows:

(1) To improve the morale and general health of the soldier while he is held for his course of treatment.

(2) To return him to his organization a better trained soldier than when he entered the hospital, by giving him courses of instruction of a military nature.

(3) To provide adequate segregation and control for all venereal cases until beyond the danger of complications, until noninfectious and, wherever possible, until entirely cured.

It has been found by experience that an ultimate cure is invariably hastened, the general health improved, and the morale of the soldier raised when he is made to live under conditions as nearly normal as possible. The soldier clothed in bathrobe lying idly on hospital bed suffers in comparison with the soldier who is fully dressed and responsible for his bunk and equipment, who exercises daily in the fresh air, thus keeping up his military training and discipline and his general physical well-being. Therefore, to attain the first aim, graduated physical exercises are provided depending upon the condition of the patient, while life in the squad room is similar to life in barracks. Display of equipment for morning and weekly inspection is standardized and the soldier is held responsible for the police of his surroundings. A high degree of personal neatness is insisted upon.

In order to provide adequate segregation for all cases of venereal disease, all patients are restricted to the limits of the hospital grounds until examination shows that they are ready for return to duty. The restriction is absolute and is enforced by a guard. The benefits derived from such restriction are self-evident.

Hawaiian Department.—The low rate for venereal disease has been very satisfactory and is a striking proof of the efficiency of venereal prophylaxis when given early. A careful inquiry will in nearly every case of infection show either a recurrence of an old infection or failure to report for prophylaxis soon after exposure. The prophylactic station in Honolulu has given excellent service, as it has enabled men to report at once and not have to wait until their return to their stations. Without this station, supplemented by smaller stations at all posts, it is probable that there would have been many more venereal infections.

Panama Department.—That the noneffective rate was reduced notwithstanding the increased admission rate, was largely effected by the institution of a segregation company, Camp at Empire, C. Z. All of the cases in the department were assembled and placed under the best conditions for treatment, while at the same time permitting them to be employed for such military and other duties as they were physically able to perform. This method of handling these cases insured the maximum amount of service being done by these men while the enforced restrictive measures served both to reduce the dangers of spreading these diseases and acted as a deterrent to others from acquiring them, and also puts the men under the best conditions for rapid recuperation by avoiding the enervating effects of protracted treatment in hospital. This result is in further confirmation of the same observations as recorded in the annual report of the department surgeon, Panama Canal Department, 1919. This segregation hospital had to be discontinued October 14, 1920, on acccunt of shortage of officers for its administration and of separate barracks accommodations.

Philippines Department—Camp Stotsenberg.—The strict quarantine of Sapang Bato, a barrio adjacent to this post, together with other measures, markedly lowered the venereal rate during the last four months of 1920. The new barrio of Margot, situated on level ground just off the post, is much more sanitary and is under military control.

Fort William McKinley.—These diseases have constantly accounted for about 40 per cent of the sick report. With the idea of intensively combating this situation the following special measures have been carried out in addition to the usual general measures which regulations govern:

(1) Six additional prophylactic stations were established.

(2) Printed instructions have been given to every organization commander in order that he might have his men instructed in the method of taking prophylactic treatment.

(3) Two reports on vice conditions at Pasay were made to the post commander, which resulted in the closer supervision of the resorts complained of by civil authorities.

These measures are believed to have resulted in a lowered incidence of venereal disease, but recent changes in station of American troops at this post have made it difficult to estimate their value.

Fort Mills.—In reference to the control of venereal disease, a series of lectures were given to the command by a medical officer during the year, and this was supplemented by educational features, such as moving pictures, the posting in barracks of appropriate bulletins, etc. A deterrent measure which seems to have borne fruit, particularly during the last quarter, was the checking of all men who exposed themselves to venereal contagion and keeping an open file on them until the report of trial by court-martial was received. The result has been that organization commanders at the present time invariably try their men when reported by this office for failure to take the prophylaxis. An additional prophylactic station was opened during the year at the pleasure resort located at San Jose, Bataan, near Fort Mills.

MEASLES.

The total number of admissions for measles for white troops in the United States was 2,339 and in Europe 101, and for the colored troops in the United States only 7. The annual admission rate for this disease for white troops in the United States was 16.81; Europe, 6.64; Philippine Islands, 3.51; Hawaiian Islands, 2.01; Panama, 4.74; China, 2.43; Siberia, 11.26; and on transports, 12.15. For colored troops the rate was 0.90 in the United States, with no admissions for them in the Philippine Islands, the only other country where they were serving. For the Porto Ricans the rate was 8.48 and for the native Filipino troops 3.02.

The admission rate for white troops in the United States was higher than that for any other year in the decade, with the exception of those for 1917, 1918, and 1911. It is, however, gratifying to notice that the death rate for white troops in the United States for 1920 was the lowest recorded during the decade. For the colored troops the admission rate was excessively low, as compared with those for the other years in the decade, with the exception of that for the year 1915, when it was 0.41, and that for 1914, when there were no cases reported.

All except 5 of the 101 admissions in Europe occurred in January and February, there being 66 cases in January and 30 in February. The chief surgeon reports that, "this disease occurred in epidemic form during January and February. It was found that a replacement detachment had not been quarantined at Brest and that its members had been assigned to organizations directly on arrival. A strict quarantine was immediately established, but the damage had already been done and the infection was disseminated throughout the Second Brigade area. The majority of these recruits had been assigned to the Fifth Infantry and this regiment furnished 69 of the 101 cases. The epidemic ceased about March 1, 1920, having lasted nearly three and a half months."

For the troops in the United States the admission rate was higher in December (50.91) than in any other month of the year, when there were 677 out of a total of 2,399 cases for the year. The rate for this month was decidedly higher than any corresponding rate for any month in the United States in 1919, or for any month of 1918, with the exception of January, when it was 85.50. As will be noted from Table 1, there was a proportionally larger number of white recruits enlisted during the latter part of the year. The highest rate was at Camp Jackson, S. C. (73.58), and the second highest at Camp Pike (50.89). The actual number of cases at Camp Jackson was 284, at Dix 218, at Pike 206, and 252 at Fort Sam Houston and Camp Travis combined.

TABLE 24.—*Measles—admissions and deaths, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	Admissions.						Deaths.					
	White.				Negro.		White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	20.97	3.13	8.44	.....	1.36	.....	0.48	.....	.....	.....	.....	.....
1912	7.55	1.82	.....	.....	1.61	10.36	.21	.....	.....	.....	.....	.....
1913	7.77	.53	9.64	.....	4.13	.....	.19	.....	.....	.....	.....	.....
1914	7.53	.84	6.24	1.00	.....	.....	.13	.....	.....	.....	.....	.....
1915	9.04	2.19	3.28	.87	.41	.....	.32	.....	0.28	.....	.....	.....
1916	[1]16.52	1.29	3.45	1.14	4.83	.....	.14	.....	.....	.....	.....	.....
1917	85.11	2.45	14 82	9.37	87.07	1.33	1.72	.....	.32	.....	0.53	.....
1918	29.59	12.80	7.46	4.10	26.35	.60	.88	.....	.....	.....	.83	.....
1919	3.74	2.83	6.05	3.20	6.08	.....	.13	.....	.....	.....	.11	.....
1920 [2]	16.81	3.51	2.01	4.74	.90	.....	.11	.....	.....	.....	.....	.....

[1] Includes National Guard officers.
[2] Includes deaths that occurred in 1920 for cases admitted prior to 1920.

EXTRACTS, REPORTS.

The following extracts from Corps Area and Department Surgeon reports are of interest:

Second Corps area.—Camp Dix, N. J.—Measles, strictly speaking, was epidemic on two occasions; first during the late winter months of the winter 1919–20 and again in October, 1920. This last epidemic continued into 1921. The cases occurred among recruits, particularly those from rural districts who had never been exposed. Measures taken to prevent the spread were isolation of susceptible contacts for 14 days and daily inspection of all organizations from which cases arose, with the hospitalization of cases showing initial symptoms, such as oculo-nasal catarrhal conditions with rise of temperature, or Koplok spots. No deaths occurred during the year from measles or its complications.

Camp Upton, N. Y.—Following the influenza epidemic, there occurred a small epidemic of measles, which began approximately on February 12, 1920, and lasted until the latter part of March. This was in an organization known as the recruit educational center. The epidemic spread rather rapidly among recruits, but was finally limited by quarantine to those companies in which there were cases. This served to check the advance of the disease very effectively.

Eighth Corps area.—With the exception of the general epidemic of influenza during the winter of 1919–20 and the occurrence of some 250 cases of measles at Camp Travis, no infectious disease has at any time appeared threatening.

The epidemic of measles at Camp Travis occurring as it did in a command composed very largely of recruits, in limited quarters, was remarkably small and indicated careful management of the situation by local authorities.

MUMPS.

During the year there were 1,300 cases of mumps among the white enlisted men in the United States, 16 among the colored soldiers in the United States, and 199 among the troops in Europe. The annual admission rate for white troops in the United States was 9.34, Europe 13.08, Philippine Islands 13.01, Hawaii 2.21, Panama, 15.59, China 0.81, and on transports 19.75. The rate for the troops in Siberia was excessive, it being 155.57. These troops were, however, in Siberia during only the first three months of the year. For

the total Army, the rate for the white troops was 10.67, for the colored 1.79, for the Porto Rican 44.35, and for the Philippine Scouts 12.06.

For the white troops in the United States the largest number of cases and the highest ratio occurred in March, 188 cases, a rate of 15.84 per 1,000. In Europe the largest number occurred in May, 59, and the highest proportional number was also for this month, 45.91. Among the more prominent stations in the United States, the largest number of cases and rate occurred at Camp Upton, 204, rate, 92.01.

SCARLET FEVER.

The total number of cases of scarlet fever reported for the year for the Army in all countries was 242. This gave a rate of 1.16, which was slightly lower than that for the preceding year, 1.48. For the white troops in the United States, the rate was 1.30, in Europe, 1.97, Hawaii 0.40, China 11.35 (14 cases), and Siberia 4.09. For all white troops the combined rate was 1.34, for colored 0.21, and there were no cases admitted for the Porto Rican or the Filipino native troops. Only six deaths occurred as the result of this disease. Two of these were for white troops in the United States, two in Europe, one in China, and one in Siberia.

The admission rate for white troops in Europe was very much higher than that for the preceding year, being 1.97 as compared with 0.61. The chief surgeon of the Expeditionary Forces states that "the endemic prevalence of the acute exanthematous disease among the civilian population in Germany renders the problem of control difficult among the troops." There has been a noticeable increase in the rate for this disease during the latter part of 1919, and during the first part of 1920, the rate rose to a much higher level, reaching the maximum of 5.69 in March. After this month it declined rapidly, and there were no cases reported for July, August, September, or October, with only one in November and two in December.

The rate for the United States was, on the contrary, much lower than that for the preceding year, it being 1.30 as compared with 3.98. In 1919 the rate had been quite high during the first part of year, but it was practically normal during the lattsr part of it. For 1920 the highest rate was in March, 4.89, the actual number of cases being 58. The greatest number (25) of cases occurred in the combined garrisons of Camp Funston, and Fort Riley, but the highest rate was for Columbus Barracks, 6.43 (9 cases).

DIPHTHERIA.

There were 250 cases of diphtheria reported in the Army during the year, with three deaths. The admission rate was 1.19, and the death rate was 0.01, both of which were lower than the corresponding rates for the preceding year, when they were 2.18 and 0.20, respectively.

However, Table 25 shows that for white troops in the United States, with the exception of the three years when the war Army existed, the rate for 1920 was higher than that for any year of the preceding decade, with the exception of the one for the year 1912.

For the white troops in the United States the rate was 1.19, in Europe 4.14, in the Philippine Islands 0.34, in Hawaii 0.60, in Panama 0.45, and in Siberia 3.07. For all white troops the rate was 1.36, for colored 0.11, and there were no cases reported for Porto Ricans or native Filipino troops. The rate which had been low in the United States for white troops in December, 1919, 0.89, showed a very sharp rise in January to 4.08, but after this month it declined rapidly, falling below one per 1,000 in May, and not rising above one again until December. In Europe the rate which had been abnormally high in December, 14.36, from January forward showed a very material decrease. During the year, however, it ran much higher than the corresponding rate for the United States, and during only one month, July, fell below one per 1,000. The largest actual number of cases among white troops at any station in the United States occurred at Camp Grant, 38, rate, 7.11.

TABLE 25.—*Diphtheria—Admissions and deaths, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	Admissions.						Deaths.					
	White.				Negro.		White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	0.78	.....	0.99	4.90	0.68	.....	.....	.....	.....	.....	.....	.....
1912	1.36	0.18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1913	.31	.....	.39	.....	.....	.....	.....	.....	.....	.....	.....	.....
1914	.62	.12	.64	.....	.....	.....	.....	.....	.....	.....	.....	.....
1915	.67	.10	.60	.....	6.15	.....	.....	0.09	.....	.....	.....	.....
1916	[1].62	.09	.15	.14	3.62	2.12	0.01	.....	.....	.....	.....	.....
1917	2.12	.....	.43	.....	.46	.....	.02	.....	.....	.....	.....	.....
1918	2.67	.35	.....	.....	.82	.....	.05	.....	.....	.....	0.03	.....
1919	2.78	.26	.....	.20	1.04	.....	.05	.....	.....	.....	.....	.....
1920 [2]	1.19	.34	.60	.45	.13	.....	.01	.11	.....	.....	.....	.....

[1] Includes National Guard officers.
[2] Includes deaths that occurred in 1920 for cases admitted prior to 1920.

TUBERCULOSIS.

There were 972 cases of tuberculosis reported in the Army for the year, and 269 deaths including those for cases admitted prior to 1920,. Including discharges for cases admitted prior to 1920 there were 3,140. It is at once apparent that the discharges exceeded by far the number of cases, which was due to the inclusion of discharges for cases admitted prior to 1920. The marked effect of the inclusion of the deaths for such cases is shown by a comparison of the death rate for white troops in the United States for 1920 in the decade table (1.08), which includes all such deaths, and that (0.37) in Table 35, which includes only the deaths for cases admitted during 1920.

The admission rate for white troops in the United States was 4.14 per 1,000, in Europe 2.76, Philippine Islands 6.11, Hawaiian Islands 2.01, Panama 2.49, China 4.06, and Siberia 11.26.

For the white troops the total rate was 4.02, for the colored 9.37, for the Porto Ricans 5.22, and for the Filipino native troops 10.42. The total number of cases admitted for white troops in the United States was 576, with a rate of 4.14 per 1,000. This rate was very much lower than those during the war, but higher than that for any

other preceding year of the decade. The same is true of the rates for colored troops in the United States. The highest monthly rate for white troops in the United States was for January (5.27). The highest admission rate for important stations in the United States was for Camp Gordon (9.27).

Table IV shows that 34 enlisted men were returned to the United States from Europe on account of tuberculosis that became manifest during the year, 45 white and 9 colored from the Philippine Islands, and the following number of white from other places: Hawaii 6, Panama 7, Siberia 3. The total number of officers and enlisted men sent home to the United States was 111.

TABLE 26.—*Tuberculosis (all)—Admissions and deaths, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	Admissions.						Deaths.					
	White.				Negro.		White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	3.80	3.77	1.99	.....	5.46	.....	0.51	0.08	.....	.....	0.68	.....
1912	3.27	4.36	2.07	7.76	2.81	10.36	.21	.45	0.30	.....	1.61	1.48
1913	3.00	6.29	3.15	3.76	5.31	8.83	.39	.31	.19	.....	.59	3.31
1914	2.67	6.45	3.20	2.49	3.28	11.18	.47	.23	.32	.....	.55	.53
1915	2.72	5.91	3.43	6.12	1.64	10.44	.27	.19	.14	0.34	.41	2.98
1916	[1] 3.83	4.51	3.00	4.13	8.44	3.17	.15	.85	.75	.14	4.83	2.12
1917	12.52	5.66	4.40	2.96	33.92	5.31	.18	.43	.....	.12	1.22	.....
1918	12.92	5.98	4.80	1.33	19.51	4.76	.27	.88	.18	.....	1.66	.....
1919	11.13	11.08	11.47	1.20	16.94	1.95	1.43	.....	.32	.20	10.17	.....
1920 [2]	4.14	6.11	2.01	2.49	8.77	12.12	1.08	.45	.40	.23	6.96	2.89

[1] Includes National Guard officers.
[2] Includes deaths that occurred in 1920 for cases admitted prior to 1920.

TABLE 27.—*Tuberculosis (all)—Discharges, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	2.85	3.77	1.99	.....	2.73	.....
1912	1.68	1.54	1.48	1.29	1.61	.74
1913	2.15	3.45	.96	2.51	2.36	6.63
1914	2.03	3.57	1.92	.48	4.38	2.66
1915	1.56	3.41	1.14	1.69	4.51	2.24
1916	[1] 1.45	2.44	3.00	3.98	6.03	.....
1917	6.45	1.17	3.22	.24	11.86	.66
1918	6.74	.70	1.07	.24	7.68	.....
1919	15.23	4.89	2.55	.20	15.28	1.95
1920 [2]	16.37	1.81	.60	1.36	30.14	1.73

[1] Includes National Guard officers.
[2] Includes discharges for cases admitted prior to 1920.

MALARIAL FEVERS.

There were 1,770 admissions for this class of fevers, with only one death, which occurred in Panama. The rate for white troops in the United States was 7.54; in Europe, 1.38; in Philippine Islands, 8.37; in Hawaii, 0.80; in Panama, 55.13; and in China, 3.24. The total rate

for white troops was 7.92; for colored, 11.06; for Porto Ricans, 24.79; and for Filipino native troops, 26.32. The rate for the white troops was higher than it has been for the three years of the war, but lower than that for any other year in the decade, and the rate for them in the Philippine Islands was very much lower than it has been at any time during the decade. For Panama the rate was lower than it had been for any other year in the decade, with the exception of that for 1911, when it was 53.92 as compared with 55.13 in 1920. As stated, there was only one death for this disease in the Army, and that occurred in Panama.

As was to be expected, the highest monthly rate in the United States for our men occurred during the summer and fall, that for August (15.21) exceeding any other. For the colored troops the rate (2.06) in the United States was low as compared with the white (7.54). On the other hand, in the Philippine Islands the rate for the colored (51.36) was higher than that for the white (8.37). The reason for the excessive rate among the colored in the Philippine Islands was doubtless due to the Ninth Cavalry, colored, being stationed at Camp Stotsenberg, which station has had for years an unenviable high malarial rate, and which had by far the highest admission rate for malarial fevers for the year. According to the chief surgeon's report, the stations in the Philippine Islands rates stood: Camp Stotsenberg 129.85, Fort Mills 7.05, Petit Barracks 34.74, Camp Eldridge 14.22, Fort William McKinley 3.23, and Camp John Hay 9.65.

TABLE 28.—*Malarial fevers (all)—Admissions and deaths, white and negro enlisted men in various countries, 1911–1920; ratios per 1,000.*

Year.	Admissions.						Deaths.					
	White.				Negro.		White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1911	15.47	75.56	6.95	53.92	0.68	.....	.....	0.08	.....	.....	.....	.....
1912	14.65	186.35	6.22	120.31	4.42	45.89	.....	.36	.....	.....	.....	.....
1913	8.82	126.27	9.05	145.55	7.67	38.65	.....	.21	.....	.....	.....	.....
1914	11.05	48.60	1.44	208.96	.....	30.35	.....	.....	.....	.....	.....	.....
1915	12.86	68.43	2.24	87.57	6.56	21.63	0.03	.....	.....	.....	.....	.....
1916	[1]22.43	60.74	2.40	66.50	10.56	87.83	.02	.....	.....	.....	.....	.....
1917	7.50	50.24	3.54	109.23	5.85	81.68	.01	.11	.....	0.25	.....	0.66
1918	3.91	22.11	.....	75.67	4.48	44.09	.01	.....	.....	.24	0.04	.....
1919	3.58	14.68	.....	82.18	1.22	45.46	.01	.26	.....	.20	.04	.....
1920[2]	7.54	8.37	.80	55.13	2.06	51.36	.....	.....	.....	.23	.....	.....

[1] Includes National Guard officers.
[2] Includes deaths that occurred in 1920 for cases admitted prior to 1920.

TYPHOID FEVER.

There were only 14 cases of typhoid fever among the military personnel during the year, with only 1 death, which occurred among the white enlisted men stationed in the United States. Three cases were reported among officers, 9 among the white enlisted men in the United States, and 1 among the colored, and 1 in Siberia.

Table 29 shows the admission and death rates from 1906–1920, inclusive. The remarkable results that have been attained by the use of the typhoid vaccine or prophylactic have been pointed out so often that it seems unnecessary to add anything additional at this time

TABLE 29.—*Typhoid fever—Admissions and deaths, white and negro enlisted men in various countries, 1906–1920; ratios per 1,000.*

Year.	Admissions.						Deaths.					
	White.				Negro.		White.				Negro.	
	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.	United States.	Philippines.	Hawaii.	Panama.	United States.	Philippines.
1906	6.00	4.08	4.31	.....	0.40	.....	0.30	.....	.....	.....	.....	.....
1907	3.61	4.16	.....	.....	.96	.....	.20	0.30	.....	.....	.....	.....
1908	2.96	3.40	.....	.....	1.38	.....	.23	.51	.....	.....	.....	.....
1909[1]	3.10	6.59	9.86	.....	1.02	1.73	.27	.17	0.92	.....	0.52	.....
1910[1]	2.41	2.53	.....	.....	.67	.....	.17	.16	.....	.....	.....	.....
1911[2]	.82	.96	.....	.....	.34	.....	.11	.....	.....	.....	.34	.....
1912	.27	.45	.30	.....	.....	.....	.03	.....	.....	.....	.....	.....
1913	.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1914	.12	.....	.....	.....	.....	.....	.05	.....	.....	.....	.....	.....
1915	.03	.....	.60	.....	.41	.....	.....	.....	.....	.....	.....	.....
1916	[4].66	.....	.15	.....	.....	.....	.02	.....	.....	.....	.....	.....
1917[3]	.41	.....	5.37	.....	.23	.....	.03	.....	.43	.....	.08	.....
1918[3]	.16	.....	.....	.....	.40	.....	.03	.....	.....	.....	.12	.....
1919[3]	.24	.....	.....	.....	.07	.....	.02	.....	.....	.....	.11	.....
1920[3]	.06	.....	.....	.....	.13	.....	.01	.....	.....	.....	.....	.....

[1] Includes paratyphoid fever.
[2] Statistics for Panama started in 1911.
[3] Statistics for United States include Alaska.
[4] Includes National Guard officers.

BERIBERI.

During the year 11 cases of beriberi were reported in the Philippine Islands for the native Filipino troops, and 3 cases in Porto Rico for the Porto Rican troops. In addition to these 3 cases reported for the Porto Rican troops, 20 cases of polyneuritis were reported, the majority of which it was stated affected the lower extremity, and were due to errors in diet. Probably most of these cases, if not all of them, were beriberi. There was 1 death reported for beriberi for the native Filipino troops, and 11 discharges for polyneuritis for the native Porto Rican troops. In this connection the following remarks from the report of the corps area surgeon, Second Corps area, relative to the errors in specifications for undermilled rice to be furnished, are of great interest:

Second Corps Area—San Juan, P. R.—The food supply is satisfactory with the exception of the rice. Polished (overmilled) rice was issued to the command.

Owing to the fact that a number of cases of polyneuritis developed at the station during the year, the matter of securing undermilled rice was taken up by the surgeon on his sanitary reports. As a result 45,000 pounds of "unpolished rice," was shipped in August to San Juan from the New York depot. After this was received the surgeon raised the question whether this was an undermilled rice containing the vitamines necessary to make it effectual for the purpose intended. This led to an investigation of the matter with the following results:

The examination made at the corps area laboratory of the samples of "unpolished" rice obtained from San Juan revealed the fact that while the grain was not actually polished, it was not "undermilled" and that the pericarp had been practically removed, thereby depriving it of the greater part of its vitamines. The chemical report showed that it contained only 0.37 per cent of ether extract (fat) and 0.29 per cent of phosphorus as phosphorous pentoxide. Its food value therefore was little if at all superior to the commercial fully polished rice.

A copy of the specification on which the rice was purchased was obtained, whereupon the reason for the laboratory findings became obvious. The specification reads as follows: "To be clean, sound, whole grain, well hulled and milled; but not polished, etc." In other words, instead of providing for an undermilled rice, the specifications demand a well milled article, thereby defeating the object sought. This matter should

be taken up with the view of securing the amendment of the specification, that an undermilled rice may be made available for issue where such issue is indicated.

Fresh garden truck is not obtainable in large amounts at prices within range of the ration allowance. This is due to the fact that large tracts of land which should be cultivated with garden truck are planted for sugar (due to recent high prices) and the indolent habits of the natives, and to the insufficiency of coolie labor.

DENGUE.

Dengue was especially prevalent among the white troops in the Philippine Islands during the year 1920, and a total of 2,240 cases were reported. There were 8 cases among the colored troops in the Philippine Islands, and 119 among the native troops. In addition to this number probably a very large per cent of the 110 cases for officers occurred there, but the statistics for officers in the Philippine Islands are grouped with those for officers serving in the other countries and hence the exact number is not shown. The occurrence, by stations and by months, for the white enlisted men is shown in the following table:

TABLE 30.—*Admissions, by stations and months, for white enlisted men in the Philippine Islands, 1920.*

Dengue.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Manila	2		98	137	106	181	192	157	143	130	62	27	1,235
Eldridge						2	2						4
Mills				2	52	87	72	83	59	49	12	3	419
Stotsenberg								1		1			2
McKinley			4	8	11	12	182	207	69	34	19	34	550
Total	2		102	147	169	282	448	448	271	214	93	64	2,240

The decade table below shows that the rate for 1920 was higher for the white troops than it had been in any preceding year in this decade, but that on the other hand the rate for the colored troops was the lowest.

There were few additions to the colored strength from the United States during the year, but a comparatively large number of white recruits were sent there.

TABLE 31.—*Dengue—Admissions, white and colored enlisted men in the Philippine Islands, 1911–1920, ratios per 1,000.*

Year.	American troops, white and colored.					
	White.		Colored.		Total.	
	Absolute numbers.	Ratios per 1,000.	Absolute numbers.	Ratios per 1,000.	Absolute numbers.	Ratios per 1,000.
1911	1,444	115.95			1,444	115.95
1912	1,119	101.67	227	168.02	1,346	108.93
1913	215	22.93	224	123.69	439	39.24
1914	286	34.15	54	28.75	340	33.16
1915	1,156	110.17	398	296.80	1,554	131.31
1916	137	12.88	5	5.29	142	12.26
1917	684	72.97	29	19.26	713	65.53
1918	501	87.86	12	7.15	513	69.50
1919	261	67.23	9	5.84	270	49.80
1920	2,240	253.37	8	4.62	2,248	212.60

TABLE 32.—*Infectious diseases—Admissions, white enlisted men, United States, by months, 1920, absolute numbers and ratios per 1,000.*

ABSOLUTE NUMBERS.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Measles	109	191	368	297	206	69	20	7	10	110	273	677	2	2,339
Mumps	102	139	188	181	142	118	64	64	34	33	60	174	1	1,300
Scarlet fever	12	30	58	38	15	2	.....	3	1	1	6	15	.....	181
Diphtheria	48	19	20	20	7	3	4	5	5	5	11	18	1	166
Influenza	4,386	3,884	767	164	64	30	12	20	18	19	12	30	2	9,408
Pneumonia	160	103	64	32	27	20	18	22	12	29	33	62	1	583
Common respiratory	4,672	4,116	4,103	2,392	1,692	1,109	1,122	1,182	1,159	1,525	2,158	3,369	4	28,603
Tuberculosis	62	55	51	47	34	37	49	49	38	36	38	35	45	576
Malarial fevers	46	22	47	59	95	118	158	169	142	92	47	51	3	1,049
Syphilis	180	128	202	148	134	130	108	100	120	141	130	160	7	1,688
Chancroids	149	108	108	96	81	78	105	100	91	108	118	116	2	1,260
Gonorrhea	647	404	474	441	415	421	508	571	530	514	574	589	33	6,121

RATIOS PER 1,000.

Measles	9.27	15.77	31.00	25.95	18.30	6.30	1.83	0.63	0.90	9.67	22.96	50.91	.....	16.79
Mumps	8.67	11.48	15.84	15.81	12.62	10.78	5.84	5.76	3.05	2.90	5.05	13.08	.....	9.34
Scarlet fever	1.02	2.48	4.89	3.32	1.33	.18	.....	.27	.09	.09	.50	1.13	.....	1.30
Diphtheria	4.08	1.57	1.68	1.75	.62	.27	.37	.45	.45	.44	.93	1.35	.....	1.19
Influenza	372.93	320.75	64.61	14.33	5.69	2.74	1.10	1.80	1.62	1.67	1.01	2.26	.....	67.61
Pneumonia	13.60	8.51	5.39	2.80	2.40	1.83	1.64	1.98	1.08	2.55	2.78	4.66	.....	4.18
Common respiratory	397.25	339.91	345.63	208.98	150.31	101.32	102.40	106.39	104.10	134.02	181.51	253.35	.....	205.55
Tuberculosis	5.27	4.54	4.30	4.11	3.02	3.38	4.47	4.41	3.41	3.16	3.20	2.63	.....	4.14
Malarial fevers	3.91	1.82	3.96	5.15	8.44	10.78	14.42	15.21	12.75	8.09	3.95	3.84	.....	7.54
Syphilis	15.31	10.57	17.02	12.93	11.90	11.88	9.86	9.00	10.78	12.39	10.93	1.20	.....	12.13
Chancroid	12.67	8.92	9.10	8.39	7.20	7.13	9.58	9.00	8.17	9.49	9.93	8.72	.....	9.05
Gonorrhea	55.01	33.36	39.93	38.53	36.87	38.46	46.36	51.40	47.61	45.17	48.28	44.29	.....	43.99

TABLE 33.—*Infectious diseases—Admissions, negro enlisted men, United States, by months, 1920; absolute numbers and ratios per 1,000.*

ABSOLUTE NUMBERS.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Measles												7		7
Mumps	3	1	1			2		1	5	1	1	1		16
Scarlet fever	1								1					2
Diphtheria										1				1
Influenza	144	171	29	2						1				347
Pneumonia (all)	6	2	3	2	1		2	1	1	2	6	1		27
Common respiratory	74	58	96	79	63	35	27	41	37	80	92	75		737
Tuberculosis (all)	7	7	7	4	5	11	3	6	7	3	2	6		68
Malarial fevers				1	1	4	2	4	2	1	1			16
Syphilis	20	10	13	6	6	7	5	12	10	4	11	11	1	116
Chancroids	42	25	11	12	11	4	11	14	23	29	23	14		219
Gonorrhea	24	23	27	11	14	22	31	74	71	35	36	53	1	417

RATIOS PER 1,000.

Measles												11.38		0.90
Mumps	4.13	1.37	1.36			3.01		1.72	8.17	1.67	1.66	1.63		2.06
Scarlet fever	1.38								1.63					.26
Diphtheria										1.67				.13
Influenza	198.35	233.61	39.51	2.75						1.67				44.70
Pneumonia (all)	8.26	2.73	4.09	2.75	1.47		4.08	1.72	1.63	3.34	9.95	1.63		3.48
Common respiratory	101.93	79.23	130.79	108.67	92.78	52.63	55.10	70.32	60.46	133.55	152.57	121.95		97.50
Tuberculosis (all)	9.64	9.56	9.54	5.50	7.36	16.54	6.12	10.29	11.44	5.01	3.32	9.76		8.77
Malarial fevers				1.38	1.47	6.02	4.08	6.86	3.27	1.67	1.66			2.06
Syphilis	27.55	13.66	17.71	8.25	8.84	10.53	10.20	20.58	16.34	6.68	18.24	17.89		14.94
Chancroids	57.85	34.15	14.99	16.51	16.20	6.02	22.45	24.01	37.58	48.41	38.14	22.76		28.21
Gonorrhea	33.06	31.42	29.97	15.13	20.62	33.08	63.26	126.93	116.01	58.43	59.70	86.18		53.70

TABLE 34.—*Infectious diseases—Admissions, white enlisted men, American Forces in Germany, by months, 1920; absolute numbers and ratios per 1,000*

ABSOLUTE NUMBERS.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Measles	66	30	1	1	1	1	.....	.....	.....	.....	.....	1	.....	101
Mumps	5	1	4	19	59	41	17	3	2	.....	15	33	.....	199
Scarlet fever	6	8	8	2	1	2	.....	.....	.....	.....	1	2	.....	30
Diphtheria	7	8	6	3	4	4	1	2	4	8	9	7	.....	63
Influenza	405	138	99	34	24	16	12	10	23	12	8	8	1	790
Pneumonia (all)	17	13	9	7	6	9	2	5	12	7	13	12	1	113
Common respiratory	541	452	371	263	169	196	179	255	174	222	291	265	1	3,379
Tuberculosis (all)	2	3	3	6	1	.....	5	5	2	2	4	8	1	42
Malaria fevers	1	1	1	3	3	4	3	3	.....	1	1	.....	.....	21
Syphilis	46	55	38	49	71	45	52	58	48	51	45	48	6	612
Chancroids	52	62	73	50	55	50	27	39	34	32	30	29	.....	533
Gonorrhea	147	150	161	147	123	92	91	84	62	67	82	100	64	1,370

RATIOS PER 1,000.

Measles	47.04	20.89	0.71	0.76	0.78	0.79	.....	.....	.....	.....	.....	0.82	.....	6.64
Mumps	3.56	.70	2.85	14.34	45.91	32.51	14.03	2.63	1.76	.....	12.38	27.00	.....	13.08
Scarlet fever	4.28	5.57	5.69	1.51	.78	1.59	.....	.....	.....	.....	.83	1.64	.....	1.97
Diphtheria	4.99	5.57	4.27	2.26	3.11	3.17	.83	1.75	3.52	6.77	7.43	5.73	.....	4.14
Influenza	288.67	96.10	70.46	25.66	18.68	12.69	9.90	8.76	20.25	10.16	6.60	6.55	.....	51.91
Pneumonia (all)	12.12	9.05	6.41	5.28	4.67	7.14	1.65	4.38	10.56	5.93	10.73	9.82	.....	7.42
Common respiratory	385.60	314.76	264.06	198.49	131.52	155.43	147.70	223.49	153.17	187.98	240.09	216.86	.....	222.02
Tuberculosis (all)	1.43	2.09	2.14	4.53	.78	.....	4.13	4.38	1.76	1.69	3.30	6.55	.....	2.76
Malarial fevers	.71	.70	.71	2.26	2.33	3.17	2.48	2.63	.....	.85	.83	.....	.....	1.38
Syphilis	32.78	38.30	27.05	36.98	55.25	35.69	42.91	50.83	42.25	43.18	37.13	39.28	.....	40.21
Chancroids	37.06	43.18	51.96	37.74	42.80	39.65	22.28	34.18	29.93	27.10	24.75	23.73	.....	35.02
Gonorrhea	104.78	104.46	114.59	110.94	95.72	72.96	75.08	73.62	54.57	56.73	67.66	81.84	.....	90.02

TABLE 35.—*Infectious diseases—Deaths, white and negro enlisted men, United States, by months, 1920. Absolute numbers and ratios per 1,000.*[1]

ABSOLUTE NUMBERS.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Measles	4	3	4			1						1		13
Scarlet fever			1	1										2
Influenza[2]	77	42	4					1						124
Pneumonia (all)[2]	47	21	9	3	3	3	3	3	2	1	3	5		103
Tuberculosis (all)[2]	4	8	5	4	2	2	2	1	1	2	3	4	14	52

RATIOS PER 1,000.

Measles	.34	.25	.34			.09						.08		.09
Scarlet fever			.08	.09										.01
Influenza	6.55	3.47	.34					.09						.89
Pneumonia (all)	4.00	1.73	.76	.26	.27	.27	.27	.27	.18	.09	.25	.38		.74
Tuberculosis (all)	.34	.66	.42	.35	.18	.18	.18	.09	.09	.18	.25	.30		.37

[1] Does not include deaths for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.
[2] The following colored deaths are not included in above table: Influenza: 2 for January 2 for March, and 1 for October. Pneumonia (all): 1 for January and 1 for February. Tuberculosis (all): 3 for January, 1 February, 1 March, 1 May, 1 June, 2 July, 2 August, 2 September, 1 October, and 1 for month not stated.

TABLE 36.—*Infectious diseases—Deaths, white enlisted men, American forces in Germany, by months, 1920. Absolute numbers.*[1]

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Month not stated.	Total.
Measles	3	1												4
Mumps	1													1
Scarlet fever				1										1
Influenza	9	2	1											12
Pneumonia (all)	2					2		1	1	1	2	1		10
Common respiratory			1						1	2				4
Tuberculosis (all)	1	2					1	2	1			1	1	9

[1] Does not include deaths for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

TABLE 37.—*Infectious diseases—Admissions, white and negro enlisted men, United States, by large stations, 1920. Absolute numbers.*[1]

ABSOLUTE NUMBERS.

Stations.	Measles.		Mumps.		Scarlet fever.		Diphtheria.		Influenza.		Pneumonia (all).		Common respiratory.		Tuberculosis (all).		Malarial fevers.		Syphilis.		Chancroid.		Gonorrhea.		Total.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Camp Benning, Ga	44	7	23	.....	.....	.....	1	.....	175	2	14	9	533	71	6	5	27	11	42	21	90	70	210	135	1,165	331
Fort Bliss, Tex.[2]	64	.....	34	.....	16	.....	3	.....	190	6	25	1	1,372	23	24	3	5	.....	18	1	49	.....	155	1	1,955	35
Columbus Barracks, Ohio	31	.....	9	.....	9	.....	8	.....	93	.....	17	.....	402	.....	4	.....	1	.....	18	.....	16	.....	96	.....	704	.....
Camp Devens, Mass	1	.....	7	.....	.....	.....	.....	.....	23	.....	3	.....	255	.....	5	.....	2	.....	13	.....	5	.....	47	.....	361	.....
Camp Dix, N. J	218	.....	112	.....	1	.....	25	.....	134	.....	36	.....	1,342	.....	26	.....	4	.....	176	.....	63	.....	340	.....	2,477	.....
Camp Dodge, Iowa	21	.....	4	.....	.....	.....	3	.....	159	.....	5	.....	295	.....	6	.....	.....	.....	56	.....	7	.....	108	.....	664	.....
Camp Eustis, Va	8	.....	2	.....	.....	.....	.....	.....	87	.....	1	.....	205	.....	3	.....	39	.....	18	.....	23	.....	52	.....	438	.....
Camp Gordon, Ga	32	.....	11	.....	1	.....	.....	.....	213	1	12	.....	410	3	20	2	60	1	52	3	60	6	132	5	1,003	21
Camp Grant, Ill	133	.....	88	.....	.....	.....	38	.....	433	1	27	.....	1,263	.....	31	.....	13	.....	25	.....	9	.....	128	.....	2,188	1
Camp Holabird, Md.[3]	1	.....	5	.....	.....	.....	.....	.....	96	.....	2	.....	699	.....	8	.....	.....	.....	29	1	20	.....	86	.....	946	1
Camp Jackson, S. C	284	.....	17	.....	.....	.....	7	.....	98	.....	8	.....	683	1	6	.....	77	.....	60	1	51	1	171	2	1,462	5
Jefferson Barracks, Mo	11	.....	8	.....	.....	.....	1	.....	142	.....	2	.....	214	.....	5	.....	14	.....	17	.....	18	.....	119	.....	551	.....
Camp Knox, Ky	71	.....	44	.....	5	.....	.....	.....	180	.....	8	.....	360	.....	7	1	9	.....	23	.....	9	2	91	10	807	13
Fort Leavenworth, Kans	1	.....	4	.....	1	.....	1	.....	109	28	2	1	304	34	3	1	4	2	19	3	8	1	47	11	503	81
Camp Lewis, Wash	102	.....	50	.....	5	.....	23	.....	177	.....	13	.....	552	1	12	.....	5	.....	23	.....	28	.....	205	.....	1,194	1
Camp Meade, Md	28	.....	29	.....	4	.....	6	.....	345	.....	13	.....	563	.....	2	.....	15	.....	45	.....	36	.....	151	.....	1,237	.....
Fort McDowell, Calif	38	.....	24	.....	.....	.....	.....	.....	116	.....	9	.....	291	.....	9	.....	13	.....	33	.....	25	.....	91	.....	649	.....
Fort Oglethorpe, Ga	56	.....	11	.....	.....	.....	.....	.....	52	.....	6	.....	398	.....	5	.....	11	.....	11	.....	23	.....	72	.....	645	.....
Camp Pike, Ark	206	.....	71	1	.....	.....	.....	.....	84	.....	15	.....	633	1	12	.....	91	.....	53	1	34	3	207	6	1,406	12
Fort Riley, Kans.[4]	22	.....	6	.....	25	.....	.....	.....	298	26	4	.....	726	67	12	3	11	.....	31	10	26	5	123	16	1,284	127
Fort Sam Houston, Tex.[5]	257	.....	38	.....	13	.....	3	.....	1,041	1	58	.....	1,702	1	39	1	182	1	171	4	129	2	478	7	4,111	17
Camp Sherman, Ohio	3	.....	1	.....	.....	.....	.....	.....	34	.....	1	.....	231	.....	7	.....	1	.....	8	.....	11	.....	74	.....	372	.....
Fort Sill, Okla	15	.....	5	.....	.....	.....	.....	.....	144	.....	2	.....	326	.....	2	.....	19	.....	59	.....	45	.....	100	.....	717	.....
Fort Slocum, N. Y	5	.....	5	.....	9	.....	4	.....	207	1	8	.....	329	.....	3	.....	8	.....	27	.....	35	.....	117	4	757	5
Camp Upton, N. Y	63	.....	204	.....	3	.....	2	.....	293	1	10	.....	480	.....	7	.....	16	.....	17	.....	13	.....	55	.....	1,163	1
Camp Zachary Taylor, Ky	190	.....	132	.....	16	.....	3	.....	452	.....	44	.....	859	.....	12	.....	11	.....	38	.....	39	.....	174	.....	1,970	.....

[1] Does not include deaths, discharges, and days lost for cases admitted prior to 1920, but does include those data for 1920 cases.
[2] Includes the strength and the sick from adjacent commands.
[3] Includes hospital cases from Fort Howard.
[4] Includes the strength and the sick from Camp Funston.
[5] Includes the strength and the sick from Kelly Field and Camp Travis; also includes some hospital cases from other adjacent commands

TABLE 38.—*Infectious diseases—Deaths, white and negro enlisted men, United States, by large stations, 1920, absolute numbers.*[1]

ABSOLUTE NUMBERS.

Stations.	Measles.		Influenza.		Pneumonia (all).		Tuberculosis (all)		Total.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Camp Benning, Ga								1		1
Fort Bliss, Tex.[2]			2		4		2	1	8	1
Columbus Barracks, Ohio			1		5				6	
Camp Dix, N. J					8		2		10	
Camp Dodge, Iowa	1		2						3	
Camp Gordon, Ga	1		1		1		1		4	
Camp Grant, Ill			3		8		1		12	
Camp Holabird, Md.[3]			1						1	
Camp Jackson, N. C					3				3	
Jefferson Barracks, Mo	1		14						15	
Camp Knox, Ky	1							1	1	1
Camp Lewis, Wash	1		3		2		3		9	
Camp Meade, Md			3		1				4	
Fort McDowell, Calif			4		2		2		8	
Fort Oglethorpe, Ga					1				1	
Camp Pike, Ark	1						1		2	
Fort Riley, Kans.[4]			1	1			3	1	4	2
Fort Sam Houston, Tex.[5]	2		18		3		2		25	
Camp Sherman, Ohio							2		2	
Fort Sill, Okla			4						4	
Fort Slocum, N. Y					2				2	
Camp Upton, N. Y	3		4		2		3		12	
Camp Zachary Taylor, Ky			7		9		2		18	

[1] Does not include deaths for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.
[2] Includes the strength and the sick from adjacent commands.
[3] Includes hospital cases from Fort Howard.
[4] Includes the strength and the sick from Camp Funston.
[5] Includes the strength and the sick from Kelly Field and Camp Travis; also includes some hospital cases from other adjacent commands.

DIVISIONS OF THE SURGEON GENERAL'S OFFICE.

DIVISION OF SANITATION.

ADMINISTRATIVE SECTION.

Reorganization.—The activites of the Division of Sanitation have been conducted during the year along the same lines as in the past, a full description of the functions of this division having been published in the annual reports of the Surgeon General for 1918, 1919, and 1920. On January 1, 1921, the Laboratory Division was merged with the Division of Sanitation. This consolidation places important duties, which are necessarily intercorrelated, under a single head. The activities of the Division of Sanitation, as now organized, were authorized in office order No. 108, Surgeon General's Office, December 28, 1920.

Personnel.—The personnel of the division, both officers and civilians, has been further reduced during the fiscal year as a result of the decrease in the strength of the Army and the general policy of the War Department with regard to decentralization.

Advanced graduate training in sanitation and hygiene.—In the last annual report of this office (pp. 235, 238, and 239) the general plans for the progressive training of selected medical officers in sanitation and hygiene was outlined. Considerable progress has been made in the development of this plan during this fiscal year and the scope of this graduate training has been more definitely crystalized.

Since the preservation of health among military personnel is the most important function of the medical department, whether in peace or war, it necessarily follows that *all* medical officers should have a very thorough knowledge of the principles underlying the practice of sanitation, including personal hygiene and the control and prevention of communicable diseases. Training in these subjects is emphasized in the basic courses given all medical officers at the Army Medical School, Washington, D. C., and at the Medical Field Service School, Carlisle, Pa. During the last session of the Army Medical School a short course on statistical methods and epidemiology was added to the curriculum and this will be continued and further elaborated.

It is recognized as a fundamental policy that for the development of the most efficient and most useful type of medical officer it is essential he be given practical experience in all the duties he may be called upon to perform. Young officers entering the service, after completion of their basic training at the medical department service schools, may expect such assignments for the first few years of their service as will give them this general experience. It is furthermore recognized that after a few years of active service (five years or more) a considerable number of officers will show a predilection for certain specialized lines of medical work, and many of these officers will

demonstrate their fitness for further training along such lines. In so far as military conditions will allow it is the policy of the Surgeon General to afford officers every facility for special training when, after a few years service, they have demonstrated their fitness for such educational opportunities. The advanced training to be given those who show notable aptitude for sanitation will be obtained in part by regular assignments to duties relating to sanitation and in part by special details.

Miscellaneous functions.—The unclassified work which falls to this division has been most diversified in character. Important among these items during the past year were the following: A large volume of correspondence with discharged soldiers relative to claims for compensation and for medical attention, which pertained to the Bureau of War Risk Insurance and which were forwarded to the director thereof, the writer being informed of the action taken; recommendation on the requests for discharge of temporary officers who have been retained in the service for further treatment; transfers of patients from one military hospital to another; certain certificates for discharge on account of disability; recommendation on the physical condition of officers examined for promotion and on the action of retiring boards, etc. A large amount of time has also been devoted to the preparation of the volume on sanitation in the United States for the "Medical and Surgical History of the War." Those portions of the new Army Regulations which have to do with duties related to this division have also been prepared and submitted.

ARMY MEDICAL MUSEUM SECTION.

During the past year the Army Medical Museum has continued the work as outlined in the previous report and has maintained the same departments. The activities of the department of pathology have been curtailed somewhat in the matter of indexing and filing due to reduction in personnel. The department of pathology and accessions was reduced on December 15, 1920, by the loss of one officer who had acted as preparator. The officer in charge of the wax-model department, who made the wax models himself, was discharged on December 31, 1920. No new models are being prepared and such as may be obtained in the future must be purchased.

The storeroom for moving picture films, previously in a fireproof vault in the basement, has been transferred to the second floor of the annex in rear of the museum, where satisfactory fireproof arrangements have been made. The present storage space is much more satisfactory as any possibility of an extension of a fire to the main museum building is entirely removed. During the latter part of the fiscal year work was begun on rewiring the building throughout for electricity and on painting the museum and library halls and the first and second floor corridors.

Consideration has been given to the problem of museum exchange throughout this country and Canada with a view to making the mass of material already on hand in the duplicate section of the museum available to other schools and medical institutions throughout the country. It is believed that a satisfactory plan will materialize which will be of great benefit to such institutions and will incidentally afford a wider range of material from which to add to the

collections of the museum. The medical profession of the United States shows an increasing tendency to call upon the museum and to depend upon it in their work, and it is believed that the establishment of an exchange for museum specimens should have added to it an exchange of roentgenological material, surgical specimens, and illustrative material on medicine and surgery, which can be so easily produced by an organization such as the Medical Department of the United States Army.

At the end of this fiscal year the activities of the instruction laboratory were transferred to the jurisdiction of the commandant, Army Medical School. These activities comprise a considerable part of the photographic work, particularly that concerned with lantern slides to be used for instruction purposes throughout the Army and certain of the work relating to the illustration of material, pathological and otherwise, for instruction purposes and for use in the technical volumes relating to the history of the World War. It will also include any work on motion picture films other than distribution. In no place can illustrative material be prepared so well. The Army Medical Museum has the technical equipment and facilities for the preparation of illustrative material and it is strongly recommended that these facilities be utilized. This will require the addition of a relatively small number of persons and in many instances can be done by temporary details for specific duties. The officer best fitted to prepare a given variety of material could be assigned for a short period and the material then duplicated by the regular force. This, however, will require that the material now on hand be adequately captioned and indexed. For this both professional and clerical assistance are needed.

In addition to the exhibit of the Medical Department at the American Medical Association in New Orleans, May, 1920, the museum prepared exhibits for the meeting of the Southern Medical Association at Louisville, Ky., in November, 1920, and another exhibit for the meeting of the American Medical Association in Boston, June, 1921. These three exhibits have consisted largely of pathological specimens and charts showing disease rates and were therefore examples of the war work of the Medical Department. It is believed that such material as illustrated the pathological collections of war wounds, injuries, etc., have been sufficiently displayed throughout the country and that in the future the exhibits should especially illustrate the work of the Medical Department in preventive medicine.

Department of pathology and accessions.—This department has continued the work of arranging the display of the material collected during the war and has received many valuable accessions from the Walter Reed General Hospital, United States Soldiers' Home Hospital, and the Letterman General Hospital, and an extremely valuable collection from the Board of Health Laboratory at Ancon, Canal Zone. In the year ending July 1, 1921, the following specimens have been accessioned: General pathology, 156; surgical, 55; neurological, 38; miscellaneous, 68; protocols received and accessioned, 1,914; making a total of 2,231 accessions. There have been 822 pathological specimens mounted for display during the year. The museum has prepared approximately 3,000 microscopic slides, of which practically 2,000 were made in the last six months of the year by the micros-

copist who entered on her duties December 1, 1920. The policy of furnishing autopsy service in the District to whoever desires it has been continued. No attempt has been made during the past year to train technicians except for the service of the institution, as it has been found impossible to have them assigned for such work.

The pathological department has continued to be hampered by its lack of clerical assistance, and also by the lack of sufficiently trained personnel to continue and perfect the indexing. A satisfactory plan for indexing the material has been worked out, but the classification will require additional clerks and additional medical officers for completion. Under existing conditions it will proceed slowly and many years will elapse before the index is in satisfactory working condition. It is not believed practicable, under existing conditions, to attempt the preparation of a volume on pathology for the Medical and Surgical History of the War, but the accessions and specimens of the museum will be used as the basis for illustrations of the pathology discussed in the various technical volumes of the history.

Department of still photography.—The work of this department, as was anticipated, has materially increased during the past year. Lantern slides and other illustrations have been used to a very large extent for teaching purposes at the various service schools and this use is increasing continuously, while the copying, enlarging, and reducing of material to be used for the illustration of the Medical and Surgical History of the War has increased to a marked degree. During the year a set of 160 lantern slides on sanitation and hygiene has been made up and 35 of these sets prepared for distribution to camps, corps areas, etc., for use in lectures. A series illustrating venereal disease has been partially prepared and will be completed during the next fiscal year.

Collections other than mosquitoes received in this department include ticks, fleas, lice, bedbugs, flies, insects, and arthropods making painful and poisonous wounds, insects connected with diseases of horses and cattle, and those injurious to food, clothing, and leather. Numerous specimens have been separated from the collections and added to the museum exhibit, while numerous other specimens have been prepared for the work of the classes at the Army Medical School.

Department of wax models.—Thirty wax models were prepared during the first half of the year, since which time 10 have been purchased. The clinics of the city have given hearty cooperation to this department.

Moving picture department.—All films of this department not on loan to Army units have been recalled. The supply is not considered sufficient to justify an outside circulation, except in an occasional instance. No new films were produced during the year. Arrangements have been made to place on sale through the Signal Corps copies of such pictures produced by the Medical Department as were considered appropriate, but no demand has been found for them. It is believed that this department should be materially enlarged and that the valuable films should be reproduced in sufficient numbers to render them available for use not only at stations throughout the Army, but also by instructors of National Guard units and by

instructors with reserve officers' training camp units and for use at training camps of all types. This department has been using the films produced during the war and these have become almost completely worn out. The reproduction of additional copies and the occasional changing of scenes, recaptioning, etc., necessitate an adequate force and organization, which does not now exist.

COMMUNICABLE DISEASES AND VITAL STATISTICS SECTION.

The collection, tabulation, and analysis of current statistics of communicable diseases, as described in previous annual reports, have been continued throughout the fiscal year and the results of these analyses have been distributed to stations in the form of weekly consolidated bulletins.

The revised statistical report (Form 86, M. D.), referred to in the last annual report of this office (p. 236), received the approval of the War Department during this fiscal year. The blank forms have been distributed and the system of reporting on this form will go into effect at the beginning of the next fiscal year (July 1, 1921). The consolidation and tabulation of current statistics is to be transferred to the jurisdiction of the Statistical Division of this office at the beginning of July, leaving the further analysis and interpretation of the assembled data as a function of the section of communicable diseases and vital statistics.

Up to the present time consolidation of weekly current statistics of communicable diseases for stations in the United States has been carried out in the office of the Surgeon General. During the coming fiscal year it is the intention to decentralize this activity, placing upon the surgeons of corps areas and departments the responsibility for detailed tabulation and analysis of current statistics depicting the movement of communicable diseases in all commands within the geographical limits of their areas or departments. When this decentralization has been accomplished, the Surgeon General's Office will be concerned primarily with the initiation of general policies relating to disease control and with the comparison and analysis of communicable disease rates for the different areas and departments, their comparison with current disease rates for the entire Army and with rates for previous years. The movement of the more important communicable diseases occurring in the Army during the present fiscal year is reviewed elsewhere in this report.

During the latter part of the fiscal year a considerable amount of attention has been devoted to a revision of the method of tabulation and presentation of the data on communicable diseases incorporated in the weekly review of disease rates now being sent out to stations. The revised report, to be inaugurated in the near future, will emphasize the importance of comparison of current rates in one area or department with those existing in others, of comparison of current rates with those prevailing during a corresponding period of time in the preceding year, and with rates for the corresponding week or month averaged for a considerable number of years.

Arrangements have been made with the Military Intelligence Division, General Staff (G–2), to secure reports of disease rates in foreign

armies for comparison with corresponding rates in our military service.

A very considerable amount of time and thought has been devoted to the preparation of regulations for the control and prevention of communicable diseases for incorporation in the revision of Army Regulations.

The Medico-Military Review has been continued during the fiscal year for the purposes outlined in the last annual report of this office. Its circulation has been extended to include all medical officers in the Regular Army and medical officers holding commissions in the National Guard. Its value as an educational measure has been amply demonstrated, and it is planned to make every effort to increase its usefulness.

INSPECTION SECTION.

Sanitary inspections of all military stations, including general hospitals and other establishments under direct War Department control, are now made by department and corps area sanitary inspectors under orders issued by the department and corps area commanders. For this reason only a limited number of inspections by a sanitary inspector from this office has been required, and during the latter part of the year, on account of the small allotment available for mileage, such inspections were entirely discontinued.

LABORATORY SECTION.

In the annual report for the fiscal year ending June 30, 1920 (pp. 227 and 228), the activities contemplated for department laboratories were discussed briefly and reference was made to plans then under way, for changing their status to conform with the reorganization plans of the War Department. During the current fiscal year these plans have received the approval of the War Department and have been published to the Army in the following General Order: No. 63, War Department, October 15, 1920.

In the early months of the fiscal year there was a shortage of properly trained commissioned personnel for laboratory duties, but this shortage does not now exist and the quality of the technical laboratory work being done throughout the Army is constantly improving.

As was pointed out in the last annual report (p. 227), every effort was made during the year to reduce that number of civilian laboratory technicians in the employ of the Government. This policy has been continued throughout the present fiscal year. On July 1, 1920, there were 19 such employees, while on July 1, 1921, only 7 remained. All those remaining will have been discharged within a period of 90 days after July 1, 1921.

The training in laboratory technique of a small number of specially selected nurses has continued and a few excellent technicians have been developed. Technical enlisted assistants to meet the emergency requirements of the laboratory service have been developed through the establishment of special courses of instruction at the Army Medical School and at the various corps area laboratories.

The portable laboratory equipment for use in the field, referred to in last annual report (pp. 233–234), is now on hand and a sufficient

number of sets of this equipment for use in emergency will be distributed in the near future. Tables of organization, equipment and transportation for such field laboratory units as were called for by the War Department have been prepared and the regulations to govern those so far authorized have been completed.

NUTRITION SECTION.

There has been little demand for activity in this section during the year. Food and messing conditions, except for some minor instances of ptomaine poisoning, have been satisfactory in the United States. In Porto Rico several cases of beriberi have been reported among the native troops. The rice furnished was found to have been too highly milled. This outbreak is being fully investigated at the close of the fiscal year and will receive mention in the next annual report.

PHYSICAL EXAMINATION SECTION.

This section has continued to maintain supervision over the physical examination of candidates for commission and for appointment to the Military Academy, applicants for appointment as warrant officers, applicants for appointment in the Officers' Reserve Corps, applicants for admission to the various training camps authorized by the War Department, and applicants for enlistment. During the current fiscal year two examinations of candidates for commission in the Regular Army were held, one in July, 1920, and the other in April, 1921. On the War Department boards, which reviewed the results of these examinations, there were detailed medical officers selected by the Surgeon General, who passed upon the physical eligibility of the candidates. The reports of the physical examination of all candidates for appointment as warrant officers were reviewed in this section and recommendation as to their physical fitness submitted to the War Department.

A comprehensive study of the physical standards which should be required of candidates for commission and applicants for enlistment was conducted during the year and text for a new set of regulations on this subject was submitted to the War Department and issued as Special Regulations No. 65½. The subject matter, with slight modifications, is to be issued as a pamphlet of the new Army Regulations. This work, which represents the matured opinions of many medical officers, is regarded as very complete and admirably arranged.

From the first of July, 1920, until February 7, 1921, when recruiting was discontinued as the result of congressional action, the intensive "drive" for recruits which had been inaugurated during the preceding year was in full force. As a result of this active campaign it is believed that many men were enlisted who would not have been accepted under more normal conditions. This is especially true of those affected with some neuro-psychiatric disease. The detection of defects of this character is often most difficult even under the best conditions and when recruiting is continued so rapidly that applicants can not be held for observation many men of this type will slip through.

HYGIENE SECTION.

Limitation of rodents and vermin.—After conference with the Surgeon General an important order was issued by the War Department on November 11, 1920 (G. O. No. 67), specifying to the interrelation of certain branches of the War Department as regards the measures required for combating rodents and insects which are transmitters of disease.

The provisions of this general order which apply to the Medical Department have been complied with by this division.

Special investigation of diseases transmitted through discharges from the respiratory tract.—It was planned to undertake some special investigations of this group of diseases during the present fiscal year, but the shortage of personnel and frequent changes in station of both personnel and troops has prevented the accomplishment of these plans to any great extent. Investigations of this nature that have been carried out and results considered worthy of presentation have been published in current scientific journals and are referred to elsewhere in this report. With the stabilization that may be anticipated in the near future, it is hoped that these investigations can be vigorously pushed.

Sterilization of water in the field.—Research work is being continued at the Army Medical School for the purpose of developing a more satisfactory substance for sterilizing water in the field, not only for use in the Lyster bag, but also having in view the development of a sterilizing agent to be carried by the individual soldier for use in an emergency. Experiments along this line have been under way for some 18 to 20 months, and while decided progress is being made an entirely acceptable solution of the problem has not been obtained at this time.

Prophylactic vaccination against pneumonia.—This procedure was continued as a voluntary measure during the late fall of 1920, but the amount of evidence available does not as yet justify an expression of opinion as to the practical value of this measure.

Venereal disease control.—The campaign against venereal disease has been carried out with unabated vigor along the lines described in the preceding annual report (p. 248). As indicated by the weekly statistical reports given below, the admission rates in the United States have been kept at approximately the same figure as during the fiscal year ending June 30, 1920, rarely rising above 60 per 1,000.

TABLE 39.—*Weekly report of the incidence of new cases of venereal disease per 1,000 men per annum among troops in the United States for the fiscal year 1921.*

[Rates given in nearest whole numbers.]

Week ending—	Rate.	Week ending—	Rate.
1920.		1921.	
July 2	37	Jan. 7	38
July 9	35	Jan. 14	55
July 16	57	Jan. 21	65
July 23	58	Jan. 28	57
July 30	41	Feb. 4	40
Aug. 6	30	Feb. 11	54
Aug. 13	28	Feb. 18	61
Aug. 20	48	Feb. 25	51
Aug. 27	47	Mar. 4	33
Sept. 3	41	Mar. 11	47
Sept. 10	42	Mar. 18	63
Sept. 17	49	Mar. 25	45
Sept. 24	41	Apr. 1	35
Oct. 1	41	Apr. 8	48
Oct. 8	47	Apr. 15	60
Oct. 15	52	Apr. 22	48
Oct. 22	61	Apr. 29	36
Oct. 29	50	May 6	43
Nov. 5	44	May 13	60
Nov. 12	51	May 20	58
Nov. 19	67	May 27	43
Nov. 26	47	June 3	33
Dec. 3	42	June 10	56
Dec. 10	62	June 17	56
Dec. 17	67	June 24	41
Dec. 24	55	July 2	30
Dec. 31	39		

The permanent statistics, which include all cases recorded in the service wherever contracted, for the calendar year ending December 31, 1919, showed an admission rate for enlisted men (white and colored) in the United States of 87.36 per 1,000. For the year ending December 31, 1920, the corresponding rate was 66.8, which is most gratifying. In Germany, Panama, and the oriental stations the rates are higher. Surgeons of all stations have been directed to maintain close relations with the local representatives of the interdepartmental social hygiene board, which shortly before the end of the current fiscal year received from the Congress a small appropriation which will permit of limited activities for the protection of soldiers and sailors during the ensuing 12 months.

SANITARY ENGINEERING SECTION.

The reports on the bacteriological examinations of water supplies at various stations throughout the Army occasionally show that certain supplies are not potable because of contamination with colon bacilli. Further investigation has indicated that, in most instances, the contamination was due to the lack of or imperfect chlorination. Insufficient or irregular application of the chlorine or hypochlorite usually has been due to defective apparatus, defective chemicals, or lack of knowledge or skill on the part of the operator. In a few instances defects in the collecting systems, in the filters, and in other permanent installations have permitted the water supply to remain contaminated after treatment. That the water supplies in use throughout the Army, on the whole, have been of satisfactory quality is evidenced by the fact that there have been no outbreaks of waterborne communicable diseases traceable to water supplies. New

installations or repairs to existing installations are urgently required at a few stations, notably Fort Myer, Fort Benjamin Harrison, Fort Crook, and the Presidio of San Francisco. These matters have been brought to the attention of the Quartermaster General and are being corrected as rapidly as funds become available.

The sewage disposal systems in operation at the various stations have in general given satisfactory results. There are, however, a few stations where the plants have not been operated to the best advantage and others where the installations are not suited to the problems at hand. In a few instances the absence of properly constructed and maintained contact beds, filters, and tanks has rendered it extremely difficult to produce an effluent of sufficient stability to permit disposal by dilution in neighboring streams and at the same time meet the local requirements relative to pollution of waterways. These defects are being corrected by the Quartermaster General as rapidly as funds become available for that purpose. The proper disposal of sewage is one of the most difficult problems in sanitary engineering, and in view of this fact the results obtained throughout the Army as a whole have been excellent.

During the fiscal year a great deal of effort has been devoted to the proper disposal of such wastes as garbage, manure, and rubbish. This has resulted in the elimination of many fly-breeding places and in maintaining the cleanly environment for which Army stations always have been noted.

Drastic curtailment of funds during the current fiscal year has prevented the prosecution of many of the measures heretofore initiated for the control of mosquitoes. As a consequence the malaria rates for the enlisted men of the Army in the United States, which began to increase during 1920, will doubtless attain a higher level during the calendar year 1921. (Rate per 1,000 per annum in 1918, 3.98; 1919, 3.38; 1920, 7.25.) Every effort is being made to prevent and control malaria by available measures (screening of buildings, thorough treatment of cases and carriers, surveys for carriers by microscopical examination of blood, oiling, and drainage work by details of enlisted personnel, etc.).

HOSPITAL DIVISION.

This division has two sections, (*a*) Professional and (*b*) Hospital. During the fiscal year 1921 there was considerable reduction in the volume of work done, with a corresponding reduction in the personnel of the division. The chief of the division inaugurates all policies and exercises general supervision over the activities of the division. He also has direct charge of the professional section, handling all questions of a professional nature. The hospital section is in charge of an assistant who attends to a portion of the general executive work, but devotes especial attention to the construction and financial matters connected with the division.

PROFESSIONAL SECTION.

As a result of the discharge of all disabled enlisted men enrolled for the period of the war and nearly all emergency officers during the current year, the activities of this section have been materially

curtailed and almost reduced to a peace-time or prewar standard. It is not the desire to convey the impression that special services are not maintained at hospitals, but that the close supervision of work and personnel has been given up by the Surgeon General's Office and greater responsibility as to character of professional service in hospitals left to the commanding officers. This action is in conformity with the general policy of decentralization and simplification of administration and is now practicable, as only officers of the regular service are on duty, and the special qualifications of those who are likely to be placed in charge of special services are pretty well known.

The section of psychology, as such, has been discontinued, but psychological examinations are made whenever specifically called for, as for the entrance class of West Point and in connection with psychiatrical examinations. Psychological ratings are of material value at all times, but are of noteworthy importance as a war time activity, when enormous amounts of new personnel must be rated and assigned to appropriate duty in a short time.

The reconstruction section has been absorbed by the Hospital Division and is one of the war activities that it is hoped can be continued indefinitely in our general hospitals. Physiotherapy, a subdivision of this section, is in reality the application of special treatment and should be so regarded. Occupational therapy, except with neuro-psychiatric and tuberculosis patients, is not essential in military hospitals in peace times. Our war experience has shown so conclusively the value of educational and vocational training that a strong effort will be made to maintain this activity in our general hospitals. Patients do not, as a rule, remain under observation long enough in station hospitals to justify establishing the service there.

The general medical and surgical work has returned to a peace-time basis, except for patients who are beneficiaries of the United States Veterans' Bureau, a number of whom are being given definitive treatment in our general hospitals. At the present time they number about 1,300 (October 1, 1921), but plans are now being formulated so that this number may be increased to 2,500, about one-half of which will be cases of tuberculosis. Seven hundred and fifty thousand dollars of the Veterans' Bureau funds are now being expended to enlarge and improve the facilities of the Fitzsimons General Hospital, where most of the cases of tuberculosis are treated.

The Army and Navy General Hospital, Hot Springs, Ark., is now operating to capacity since the admission of 175 Veterans' Bureau patients, the great majority of whom suffer from arthritis, rheumatism, neuritis, and other diseases which the waters of Hot Springs have an established reputation in promoting the cure of.

The high grade medical and surgical clinics established at the Walter Reed General Hospital during the war, plus the excellent administration features, well-selected reconstruction program, and diversity of recreational measures available, have made this institute one of the most satisfactory places for beneficiaries requiring general medical and surgical treatment.

HOSPITAL SECTION.

Patients in general hospital.—This year has seen the completion of the demobilization of the large general hospitals built or leased and organized during the World War. However, all of the sick resulting from the war and being cared for in the general hospitals have not been disposed of. Those of the temporary army who were remaining on June 30, 1921, were discharged from the Army and taken up as beneficiaries of the Bureau of War Risk Insurance. Table No. 40 shows the general hospital bed situation as of June 30, 1920, while Table No. 41 is inserted to show the same data at the close of the present fiscal year.

TABLE 40.—*Beds available and occupied in general hospitals. June 30, 1920.*

Hospitals caring for oversea patients and others requiring general hospital treatment.	Bed situation.			Authorized capacity.
	Occupied.	Vacant.	Total.	
Army and Navy General Hospital, Hot Springs, Ark.	67	133	200	200
Fitzsimons General Hospital, Denver, Colo.	688	512	1,200	1,200
Hoff General Hospital, Staten Island, N. Y.	556	194	750	750
Lawson General Hospital, Atlanta, Ga.	379	221	600	600
Letterman General Hospital, San Francisco, Calif.	548	202	750	750
Lovell General Hospital, Fort Sheridan, Ill.	808	192	1,000	1,000
O'Reilly General Hospital, Oteen, N. C.[1]	442	58	500	500
Walter Reed General Hospital, Takoma Park, D. C.	1,265	235	1,500	1,500
Base hospital, Fort Sam Houston, Tex.	330	270	600	600
Total.	5,083	2,017	7,100	7,100

[1] Biltmore railroad station.

TABLE 41.—*Beds available and occupied in general hospitals, June 30, 1921.*

Hospitals caring for oversea patients and others requiring general hospital treatment.	Bed situation.			Authorized capacity.
	Occupied.	Vacant.	Total.	
Army and Navy General Hospital, Hot Springs, Ark.	227	23	250	250
William Beaumont General Hospital, El Paso, Tex.				414
Fitzsimons General Hospital, Denver, Colo.	826	174	1,000	1,000
Letterman General Hospital, San Francisco, Calif.	520	230	750	750
Walter Reed General Hospital, Takoma Park, D. C.	1,155	345	1,500	1,500
Sam Houston, Fort Sam Houston, Tex.	702	0	702	600
Total.	3,430	772	4,202	4,514

Changes in general hospitals.—It will be noted that four general hospitals have been discontinued and one new one added. Those discontinued were: (1) the Hoff General Hospital, Staten Island, N. Y., transferred to the Public Health Service, October 15, 1920; (2) the Lawson General Hospital, Fort McPherson, Atlanta, Ga., discontinued as a general hospital and opened as a station hospital on October 10, 1920; (3) the Lovell General Hospital, Fort Sheridan, Ill., discontinued as a general hospital and opened as a station hospital on October 10, 1920; and (4) the O'Reilly General Hospital, Oteen, N. C., transferred to the Public Health Service, October 15, 1920. The new one added was the William Beaumont General

Hospital, El Paso, Tex., which was constructed during the year and opened in June, 1921.

Hospital construction and repair.—An effort was made to have the statutory limitation on hospital buildings changed to a minimum of $50,000 but this was not accomplished. Unsuccessful efforts were made to secure funds for the improvement of Medical Department facilities principally at the following places: the hospitals at Schofield Barracks, Camps Benning, Knox, Vail, and Holabird; the nurses' quarters at Forts Slocum, Leavenworth, McDowell, Columbus Barracks, and the William Beaumont General Hospital; the completion of the Army Medical School, and permanent enlargements for the Walter Reed General Hospital and the Letterman General Hospital.

The following funds were secured for the fiscal year:

Construction and repair of hospitals	$1,594,900
Quarters for hospital stewards	20,000

Of the first item above, $1,000,000 was considered necessary for the maintenance and repair alone, but it was found possible to do with it also a considerable amount of new construction. Of the amount allowed $500,000 was appropriated specifically for the construction of the Army Medical School and $94,900 for the replacement of two temporary wards at the Letterman General Hospital.

With the $1,000,000 the following are some of the more important projects accomplished in addition to the maintenance and repair of the Army hospitals: (*a*) two new permanent buildings, additional fire prevention, and other improvements at Walter Reed General Hospital, totaling about $90,000; (*b*) miscellaneous improvements at the Fitzsimons General Hospital amounting to $40,000; (*c*) installation of gas and modern refrigeration at the William Beaumont General Hospital; (*d*) modified completion of the Camp Knox Hospital $13,500; and (*e*) miscellaneous new work at the Army and Navy General Hospital, Tripler General Hospital, and at the station hospitals at Fort Howard, Fort Benjamin Harrison, Fort Crook, Fort McPherson, and Camp John Hay, in all amounting to about $30,000.

The work was not begun on the Army Medical School, but the funds will be available until used.

The work was started on the wards at the Letterman General Hospital, which was well under way at the close of the fiscal year.

The $20,000 appropriated for "Quarters for Hospital Stewards" sufficed to construct one new set of quarters, to complete another, and to keep those already in existence in repair.

In addition to the improvements effected by the above War Department appropriations, the Fitzsimons General Hospital was greatly improved with War Risk funds. In order to increase the facilities for the care of the tuberculous War Risk beneficiaries at that hospital, approximately $750,000 was allowed and used. Some of the most important things accomplished were:

(*a*) Conversion of four open-air wards into infirmaries.

(*b*) Conversion of two open-air wards into semi-infirmaries.

(*c*) Additions to two storehouses, two large kitchens, and to the bakery, laundry, an administration building.

(*d*) General improvements for the hospital infirmary personnel, nurses' quarters, officers' quarters, and noncommissioned officers' quarters.

(*e*) General improvements and extensions in the post utilities.

Hospital trains and unit cars.—Hospital trains No. 1 and No. 3, each of seven cars at Hoboken, were transferred to the Quartermaster General with recommendation for their disposal since they were no longer of use to the Medical Department. Train No. 4 of seven cars at Army Supply Base, Brooklyn, with the exception of cars No. 1 and No. 3, which were loaned to the Coast Artillery for experimental purposes, was transferred to Quartermaster General for similar disposition. These trains were composed of old wooden cars which were antiquated, unsuitable, and dangerous.

The unit cars were used for the movements of the sick during the year when they were necessary. There are 20 of these Government owned cars which are now located as follows:

Number.	Station.
1, 2, 3, 4, 5, 8, 9, 10, 13	San Antonio, Tex.
6	Fort Sheridan, Ill.
7	Presidio of San Francisco, Calif.
11, 12, 14, 16, 29	Army Supply Base, Brooklyn, N. Y.
15, 17	Hoboken, N. J.
18, 19	Norfolk, Va.

COORDINATION, ORGANIZATION, AND EQUIPMENT DIVISION.

The Coordination, Organization and Equipment Division was occupied during the period July 1, 1920, to June 30, 1921, either directly or in cooperation with other divisions of this office, in the following major activities:

1. Plans for the organization of the Medical Department for peace and war under act of June 4, 1920, and the subsequent reorganization made necessary by the reduction of the Army under recent legislative acts.

2. Preparation of tables of organization of Medical Department units, and furnishing to other branches data for incorporation in tables of organization pertaining to those branches which include attached medical personnel.

3. Preparation of data for the General Staff regarding the Medical Department personnel and installation requirements for basic scheme of mobilization, maximum effort plan, with particular reference to the zone of the interior.

4. The conduct by one officer of the division of the contact work as representative of the Surgeon General at the General Staff College during the 1920–21 course.

5. Preparation of equipment tables for Medical Department units and for medical, dental, and veterinary personnel.

6. Study of grades and specialist ratings for enlisted men of the Medical Department and definition of policy with reference to allotment of same.

7. Training projects affecting the Medical Department, including the establishment of Reserve Officers' Training Corps units in medical, dental, and veterinary schools; courses for the citizen's military training camp, and Medical Department schools; internes in Army hospitals; basic training for Medical Department recruits; and training of Reserve and National Guard personnel and units.

8. Progressive revision of Army Regulations and War Department documents.

9. The preparation and publication of the plan for evacuation of casualties, theater of operations, and the revision of nomenclature affecting Medical Department units.

10. Preparation and drafting of definite plans for the utilization of medical service installations in the forward areas during war.

11. Studies showing Medical Department phases of any grand scale mobilization plan, including the functioning of the Medical Department unit at concentration camps.

12. Revision of tables of basic allowance.

13. Standardization of animal-drawn transportation in conference with subcommittee representing all branches.

14. Studies upon the development of Medical Department material including activities of equipment laboratory, Carlisle Barracks, Carlisle, Pa., inventions and suggestions submitted by persons in and out of the military service, and those supplied by the Military Intelligence Division emanating from foreign countries.

15. Preparation of basic data relative to recommendations to be presented for new legislation, including organization of the Medical Department, increased allowance of enlisted personnel, acquisition of land for training purposes, promotion of commissioned officers, and establishing status of Army Nurse Corps.

16. Development of "type" railway trains for use in transporting Medical Department units (progressive).

17. Study of types of transportation suitable for use by the Medical Department as combat wagons.

18. Inauguration of joint Army, Navy, and Public Health Service Board for the study and standardization of material common to more than one of these services and the development of policies regarding mobilization of personnel for services in these branches during war.

19. Preparation of articles on medico-military matters for publication in professional and lay journals.

20. Studies on and action directed toward the revision of forms for reports and returns and reduction of paper work in the Medical Department.

21. Study and preparation of various operation plans for submission to the War Department, including certain phases of war plans white and green, defense of Panama, and defense of Oahu, and the maximum effort plan.

22. Study of method of marking Medical Department vehicles and equipment, and plans for marking hospital formations against air attack.

23. Study of and recommendations toward the adoption of designs to be shown on the colors of medical regiments and schools.

24. Complete study on "The preparation of the Medical Department phases of operation plans."

25. Systematic canvass of experienced officers of the Medical Department for constructive comment and criticism in connection with projects the policy in regard to which is not already crystallized, and the dissemination of information to interested officers of the Medical Department on proposed and accepted projects.

26. Production by one officer of the division of the history of the medical supply activities of the American Expeditionary Forces in France.

27. General contact with the divisions of the General Staff and The Adjutant General's Office.

28. Complete study of the needs of the Medical Department in General Staff and War Department organization, prepared in anticipation of there being appointed a board within the War Department for the consideration of this question.

PERSONNEL DIVISION.

COMMISSIONED PERSONNEL, REGULAR SERVICE.

TABLE 42.—*Casualties in the Medical Corps, Dental Corps, Veterinary Corps, and Medical Administrative Corps, for the fiscal year ending June 30, 1921.*

MEDICAL CORPS.

	Per cent of total loss.
Retired for disability	15, or 12.10
Retired after 30 years' service	2, or 1.61
Placed in Class B and retired under the act of June 4, 1920	3, or 2.42
Died	3, or 2.42
Resigned	49, or 39.51
Discharged, failed to pass examination for promotion	8, or 6.45
Discharged by the President	1, or .81
Dropped as deserter	1, or .81
Declined appointment	42, or 33.87
Per cent of casualties to strength of corps	10.34

DENTAL CORPS.

Retired for disability	5, or 20.00
Died	1, or 4.00
Resigned	9, or 36.00
Discharged, failed to pass examination for promotion	1, or 4.00
Transferred to Field Artillery	1, or 4.00
Declined appointment	8, or 32.00
Per cent of casualties to strength of corps	9.88

VETERINARY CORPS.

Retired for disability	3, or 17.65
Resigned	7, or 41.18
Discharged, failed to pass examination for promotion	4, or 23.52
Transferred to Quartermaster Corps	1, or 5.88
Declined appointment	2, or 11.77
Per cent of casualties to strength of corps	10.49

MEDICAL ADMINISTRATIVE CORPS.

Resigned	1, or 14.29
Transferred to Quartermaster Corps	2, or 28.57
Declined appointment	4, or 57.14
Per cent of casualties to strength of corps	4.96

TABLE 43.—*Number of commissioned officers authorized for the Medical Corps, Dental Corps, Veterinary Corps, and Medical Administrative Corps, the number of officers commissioned in all grades, and the number of vacancies existing at the periods stated.*

MEDICAL CORPS.

	Authorized.	Commissioned.	Vacancies.	Surplus.
July 1, 1920	1,823	782	1,041	
Feb. 7, 1921	1,138	1,199		61
June 30, 1921	1,138	1,174		36

DENTAL CORPS.

July 1, 1920	298	196	102	
Feb. 7, 1921	193	253		60
June 30, 1921	193	246		53

VETERINARY CORPS.

July 1, 1920	175	85	90	
Feb. 7, 1921	175	162	13	
June 30, 1921	175	159	16	

MEDICAL ADMINISTRATIVE CORPS.

July 1, 1920	140		140	
Sept. 30, 1920	140	39	101	
Dec. 18, 1920	140	141		1
Feb. 7, 1921	88	141		53
June 30, 1921	88	138		50

In addition to the established method of selecting and training of candidates for appointment in the Medical Corps of the Regular Army a new procedure for that purpose was authorized by the War Department on May 13, 1920, whereby selected applicants for commission who had satisfactorily completed collegiate courses at accredited medical schools, and who were otherwise eligible, could serve the required one year's interneship in certain Army hospitals and could then receive a commission in the Medical Corps of the Regular Army without examination otherwise than physical, provided that the service rendered as interne was satisfactory and provided they were acceptable to the Surgeon General of the Army.

The following were the hospitals designated:

Walter Reed General Hospital, Washington, D. C.
Fitzsimons General Hospital, Denver, Colo.
Letterman General Hospital, San Francisco, Calif.
Tripler General Hospital, Honolulu, Hawaii.
Station hospital, Fort Sam Houston, Tex.

The results attained during the fiscal year ending June 30, 1921, through the operation of this plan were as shown in the table below:

Number of applicants	47
Failed to meet requirements	9
Accepted	38
Declined appointment	17
	21
Qualified and accepted previous to July 1, 1920	2
	23

Entered upon interneship:		
At Walter Reed General Hospital	5	
At station hospital, Fort Sam Houston	1	
		6
Interneship to begin after June 30, 1921		17

TABLE 44.—*Number of officers of the Medical Department, exclusive of Reserve officers, in active service during fiscal year ending June 30, 1921.*

	July 1, 1920.			Sept. 30, 1920.			Jan. 1, 1921.			June 30, 1921.		
	Regular.	Temporary.	Total.	Regular.	Temporary.	Total.	Regular.	Temporary.	Total.	Regular.	Temporary.	Total.
Medical Corps	[1] 786	946	1,732	[2] 1,136	597	1,733	[2] 1,215	.....	1,215	[3] 1,181	.....	1,181
Dental Corps	196	126	322	252	53	305	256	.....	256	[1] 250	.....	250
Veterinary Corps	[4] 87	196	283	[5] 162	78	240	[5] 164	.....	164	159	.....	159
Medical Administrative Corps	.....	.....	.....	39	.....	39	141	.....	141	138	.....	138
Sanitary Corps	.....	219	219	.....	143	143	.....	.....	.....	.....	.....	.....
Ambulance Service	.....	3	3	.....	2	2	.....	.....	.....	.....	.....	.....
Line and other staff corps	.....	.....	30	.....	.....	24	.....	.....	2	.....	.....	.....
Contract surgeons	.....	.....	38	.....	.....	35	.....	.....	36	.....	.....	39

[1] Includes 4 retired officers on active duty.
[2] Includes 5 retired officers on active duty.
[3] Includes 7 retired officers on active duty.
[4] Includes 2 retired officers on active duty.
[5] Includes 1 retired officer on active duty.

TABLE 45.—*Changes in the Regular Medical Corps, Dental Corps, Veterinary Corps, and Medical Administrative Corps.*

MEDICAL CORPS.

	Major generals.	Brigadier generals.	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Total.
June 30, 1920	1	2	52	100	361	80	186	782
June 30, 1921	1	2	46	97	495	455	78	1,174
Appointments	.....	.....	.....	4	152	237	123	516
Losses:								
Declined appointment	.....	.....	.....	.....	4	24	14	42
Deaths	.....	.....	.....	.....	.....	2	1	3
Resignations	.....	.....	1	1	14	16	17	49
Retirements	.....	.....	5	6	1	2	6	20
Discharges	.....	.....	.....	.....	.....	.....	9	9
Dropped	.....	.....	.....	.....	1	.....	.....	1

DENTAL CORPS.

	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Total.
June 30, 1920	9	15	65	65	42	196
June 30, 1921	8	15	63	121	39	246
Appointments	.....	.....	2	19	54	75
Losses:						
Declined appointment	.....	.....	.....	2	6	8
Deaths	.....	.....	1	.....	.....	1
Resignations	.....	.....	1	3	5	9
Retirements	1	.....	2	1	1	5
Discharges	.....	.....	.....	.....	1	1
Transferred to Field Artillery	.....	.....	.....	1	.....	1

TABLE 45.—*Changes in the Regular Medical Corps, Dental Corps, Veterinary Corps, and Medical Administration Corps*—Continued.

VETERINARY CORPS.

	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.
June 30, 1920			7	16	20	42	85
June 30, 1921	4	6	15	29	91	14	159
Appointments				18	46	27	91
Losses:							
Declined appointment				1	1		2
Resignations					6	1	7
Retirements				1	2		3
Discharges					1	3	4
Transferred to Quartermaster Corps						1	1

MEDICAL ADMINISTRATIVE CORPS.

	Captains.	First lieutenants.	Second lieutenants.	Total.
June 30, 1920				
June 30, 1921	51	20	67	138
Appointments	52	20	73	145
Losses:				
Declined appointment	1		3	4
Resignations			1	1
Transferred to Quartermaster Corps			2	2

COMMISSIONED PERSONNEL, RESERVE CORPS.

MEDICAL CORPS.

At the close of the fiscal year, June 30, 1921, there was a total of 5,768 accepted commissions in the Medical Reserve Corps, distributed in the various grades as follows: Brigadier generals, 3; colonels, 100; lieutenant colonels, 422; majors, 1,892; captains, 2,403; first lieutenants, 948.

The Reserve Corps was reopened for appointments on October 4, 1920, and since that date the board reviewed the records of 760 applicants.

Of the 760 applications acted upon during the year 1 applicant died, 116 were rejected, the greater number of rejections being due to physical disability. Two hundred and seventy declined their commissions after appointment.

At the beginning of the year there were 689 appointments pending. Six hundred and sixty-eight appointments were canceled by reason of nonacceptance or inability to locate the appointees.

The corps was reduced by 111 resignations, 18 discharges, 29 deaths, and 79 automatic termination of commissions by reason of appointment in the Regular Army Medical Corps.

The percentages of the above casualties of appointments were:

	Per cent.
Commissions canceled	56.85
Resignations	9.45
Discharges	1.53
Deaths	2.47
Appointments in the Regular Army	6.73
Declinations	22.97

The total percentage of casualties of the Medical Reserve Corps for the fiscal year being 18.65 per cent.

There are now (September 1, 1921) 5,804 officers in the Medical Officers' Reserve Corps, distributed in grades and States as follows:

States.	Brigadier general.	Colonel.	Lieutenant colonel.	Majors.	Captains.	Lieutenants.	Total.
Alabama:							
White		2	1	23	36	12	74
Colored				1	2	6	9
Arizona			1	9	6	2	18
Arkansas:							
White			2	10	30	6	48
Colored						4	4
California:							
White			21	114	119	22	276
Colored					1	1	2
Colorado		2	12	29	37	10	90
Connecticut		2	4	23	27	6	62
Delaware:							
White			1	4	3		8
Colored						1	1
District of Columbia:							
White		4	16	18	12	5	55
Colored				1		8	9
Florida:							
White			3	25	20	5	53
Colored						4	4
Foreign:							
White		2	4	16	24	13	59
Colored						1	1
Georgia:							
White			4	22	45	12	83
Colored					1	8	9
Idaho				14	17	1	32
Illinois:							
White		8	26	139	191	73	437
Colored					1	18	19
Indiana:							
White		2	7	70	76	14	169
Colored				3	1	5	9
Iowa:							
White		2	6	52	70	15	145
Colored					1		1
Kansas:							
White			4	35	58	13	110
Colored						7	7
Kentucky:							
White		2	7	38	51	13	111
Colored					1	16	17
Louisiana:							
White			3	21	24	4	52
Colored					1	8	9
Maine			2	15	21	4	42
Maryland:							
White	2	4	9	22	25	9	71
Colored						2	2
Massachusetts:							
White		9	27	76	97	26	235
Colored						2	2
Michigan:							
White		2	13	53	57	21	146
Colored					1	2	3
Minnesota		5	8	35	59	18	125
Mississippi:							
White			6	24	22	8	60
Colored						8	8
Missouri:							
White		4	12	59	108	29	212
Colored					2	16	18
Montana			1	19	25	5	50
Nebraska			4	28	39	9	80
Nevada				3	4		7
New Hampshire		1	4	9	22	4	40
New Jersey:							
White			18	50	49	28	145
Colored						8	8
New Mexico			2	7	15	8	32
New York:							
White		29	76	184	189	92	570
Colored					3	2	5
North Carolina:							
White		1	5	15	29	10	60
Colored					1	12	13

States.	Brigadier general.	Colonel.	Lieutenant colonel.	Majors.	Captains.	Lieutenants.	Total.
North Dakota			1	19	22	3	45
Ohio:							
White	1	2	15	79	114	25	236
Colored					1	6	7
Oklahoma:							
White			4	33	54	11	102
Colored					1	8	9
Oregon			7	35	31	7	80
Pennsylvania:							
White		15	54	171	156	44	440
Colored					2	11	13
Rhode Island			3	15	5	2	25
South Carolina:							
White			4	19	26	8	57
Colored				1		4	5
South Dakota			1	13	27	5	46
Tennessee:							
White		1	4	37	32	14	88
Colored				1	4	19	24
Texas:							
White		1	4	74	118	23	220
Colored					1	35	36
Utah			1	7	9	9	26
Vermont			2	9	16	1	28
Virginia:							
White		1	2	28	26	14	71
Colored					2	20	22
Washington:							
White			7	39	40	14	100
Colored						2	2
West Virginia:							
White			1	13	37	5	56
Colored						3	3
Wisconsin:							
White		1	6	41	63	19	130
Colored						1	1
Wyoming				2	11	2	15
Total white	3	102	425	1,895	2,394	703	5,522
Total colored				7	27	248	282
Grand total	3	102	425	1,902	2,421	951	5,804

At the beginning of the fiscal year 1921 there were on active duty 9 majors, 5 captains, and 1 first lieutenant. Owing to the large number of disabled soldiers in hospitals and the discharge of all temporary officers, it was necessary to call during the year other Reserve officers to active duty at posts and stations where medical attendance was actually required.

The average length of active service was six months. The number in each grade called to duty, follows: Brigadier generals, 2; colonels, 1; lieutenant colonels, 3; majors, 14; captains, 39; first lieutenants, 10. One captain died while on active duty.

At the close of the year June 30, 1921, all officers had been relieved from duty with the exception of one brigadier general, and the following number (retained under the provisions of the Army appropriations act for the fiscal year 1922), necessary to supplement Regular Army officers in the care of patients of the War Risk Bureau in Army hospitals: Majors, 8; captains, 26; first lieutenants, 6.

There were no Reserve medical officers called to duty for training during the year.

Classification of the officers of the Medical Reserve Corps according to specialty, ability, and qualifying remarks of commanding officers under whom they served, has been continued. These officers are now being selected for assignment with troops or special units.

DENTAL CORPS.

At the close of the fiscal year, June 30, 1921, there was a total of 3,761 accepted commissions in the Dental Reserve Corps, distributed in the various grades as follows: Lieutenant colonels, 16; majors, 103; captains, 501; first lieutenants, 3,141.

The Dental Reserve Corps was reopened for appointments on October 4, 1920, and since that date the board reviewed the records of 120 applicants.

At the beginning of the year there were 225 appointments pending, of which 140 were canceled by reason of nonacceptance or inability to locate the appointees.

Of the 120 applications acted upon during the year, 15 were rejected, the greater number of rejections being due to physical disability. Seventy-eight declined their commissions after appointment.

The corps was reduced by 45 resignations, 7 discharges, 9 deaths, and 4 automatic terminations of commissions by reason of appointment in the Regular Army Dental Corps.

The percentages of the above casualties of appointments were:

	Per cent.
Commissions canceled	49.47
Resignations	15.90
Discharges	2.48
Deaths	3.18
Appointments in Regular Army	1.41
Declinations	27.56

Total percentage of casualties of the Dental Reserve Corps for the fiscal year, 7.1 per cent.

There are now (September 1, 1921) 3,744 officers in the Dental Officers' Reserve Corps, distributed in grades and States as follows:

States.	Lieutenant colonels.	Majors.	Captains.	Lieutenants.	Total.
Alabama:					
White			6	18	24
Colored			1	2	3
Arizona				4	4
Arkansas			3	18	21
California:					
White	2	5	21	116	144
Colored				2	2
Colorado			7	32	39
Connecticut			10	57	67
Delaware		1	2	5	8
District of Columbia:					
White		2	7	15	24
Colored				3	3
Florida:					
White		2	5	18	25
Colored				2	2
Foreign			3	16	19
Georgia:					
White		2	8	43	53
Colored				1	1
Idaho			1	12	13
Illinois:					
White	1	8	26	251	286
Colored				4	4
Indiana:					
White	2	3	28	81	114
Colored				1	1
Iowa:					
White	2	3	11	112	128
Colored				1	1
Kansas		1	14	65	80
Kentucky		2	4	43	49

States.	Lieutenant colonels.	Majors.	Captains.	Lieutenants.	Total.
Louisiana:					
White	1	1	4	45	51
Colored				1	1
Maine		1	4	30	35
Maryland			5	29	34
Massachusetts:					
White	1	6	43	215	265
Colored				3	3
Michigan	1	4	10	76	91
Minnesota	1	2	18	134	155
Mississippi:					
White		3	4	11	18
Colored				1	1
Missouri:					
White	1	4	23	176	204
Colored			1	3	4
Montana			3	20	23
Nebraska			7	58	65
Nevada			1	2	3
New Hampshire		1	2	11	14
New Jersey:					
White		4	22	76	102
Colored				1	1
New Mexico			1	3	4
New York:					
White	3	5	42	416	466
Colored			1	4	5
North Carolina:					
White		2	3	55	60
Colored				3	3
North Dakota			3	17	20
Ohio:					
White		7	18	143	168
Colored			3	2	5
Oklahoma:					
White		1	6	17	24
Colored				3	3
Oregon			8	36	44
Pennsylvania:					
White	2	9	39	224	274
Colored			2	1	3
Rhode Island			7	11	18
South Carolina:					
White		2	4	22	28
Colored				1	1
South Dakota		1	2	30	33
Tennessee:					
White		1	11	25	37
Colored				5	5
Texas:					
White		0	12	65	86
Colored				3	3
Utah		3	2	19	24
Vermont		1	1	7	9
Virginia:					
White		1	3	17	21
Colored				3	3
Washington		2	12	45	59
West Virginia:					
White		1	3	31	35
Colored				1	1
Wisconsin		3	16	90	109
Wyoming			1	7	8
U. S. Army				1	1
Total white	17	103	496	3,069	3,685
Total colored			8	51	59
Grand total	17	103	504	3,120	3,744

It was necessary during the year to call 32 Dental Reserve officers to duty when temporary officers were discharged. The average length of service of each officer was six months. The number in each grade called to duty follows: Majors, 4; captains, 10; first lieutenants, 18. All have been relieved from duty June 30, 1921.

There were no Dental Reserve officers called to duty for training during the year.

Classification of officers of the Dental Reserve Corps according to specialty has been continued. These officers are now being selected for assignment with troops or special units.

VETERINARY CORPS.

At the close of the fiscal year, June 30, 1921, there was a total of 368 accepted commissions in the Veterinary Reserve Corps, distributed in the various grades as follows: Majors, 13; captains, 53; first lieutenants, 115; second lieutenants, 187.

The Veterinary Reserve Corps was reopened for appointments on October 4, 1920, and since that date the board reviewed the record of 126 applicants.

Of the 126 applications acted upon during the year, 14 were rejected, the greater number of rejections being due to physical disability. Twenty-three declined their commissions after appointment. Fifty appointments are pending declination or acceptance.

The corps was reduced by 10 resignations, 1 discharge, and 4 automatic terminations of commission by reason of appointment in the Regular Army Veterinary Corps.

The percentages of the above casualties of appointment were:

	Per cent.
Resignations	25.64
Discharges	2.56
Appointments in Regular Army	12.82
Declinations	58.98

Total percentage of casualties for the Veterinary Reserve Corps for the fiscal year, 9.58 per cent.

There are now (September 1, 1921), 389 officers in the Veterinary Reserve Corps, distributed in grades and States as follows:

States.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.
Alabama		3	5	2	10
Arizona				1	1
California	1	2	10	6	19
Colorado		1	5	5	11
Connecticut		2	1	1	4
District of Columbia			1	3	4
Florida			1	3	4
Foreign			1	2	3
Georgia		1	2	1	4
Idaho		2	1	1	4
Illinois	2	2	5	11	20
Indiana			5	7	12
Iowa	1	1	5	16	24
Kansas	1	1	6	9	17
Kentucky		1	1	2	4
Louisiana		1			1
Maine		1			1
Maryland			2	1	3
Massachusetts			7	2	9
Michigan	1	3	3	6	13
Minnesota		3	5	13	21
Mississippi				5	5
Missouri		1	4	11	16
Montana	1		1	1	3
Nebraska		1	3	9	13
New Jersey		1	1		2
New Mexico			1		

States.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.
New York	8	4	6	21	34
North Carolina			1	5	6
North Dakota		1	4	6	11
Ohio:					
White	2	7	8	17	34
Colored				1	1
Oklahoma			1	2	3
Oregon		2	1		3
Pennsylvania	2	7	8	10	27
South Carolina, colored				1	1
South Dakota			2		2
Tennessee		1		2	3
Texas		1	4	7	12
Utah		1			1
Vermont			1	3	4
Virginia		1			1
Washington			1	1	2
West Virginia				1	1
Wisconsin		2	5	6	13
Wyoming				1	1
Total white	14	54	119	200	387
Total colored				2	2
Grand total	14	54	119	202	389

It was necessary during the year to call 15 Veterinary Reserve officers to duty. The average length of service for each officer was six months. The number in each grade called to duty follows: Captains, 2; first lieutenants, 10; second lieutenants, 3. All have been relieved from duty June 30, 1921.

There were no Veterinary Reserve officers called to duty for training during the year.

Classification of officers of the Veterinary Reserve Corps has been continued, and these officers are now being selected for assignment with troops or special units.

SANITARY CORPS.

During the year the Sanitary Reserve Corps was authorized. Owing to the fact that this corps was not previously authorized by law, applicants qualified for duties of the Sanitary Corps were commissioned in the Quartermaster Reserve Corps. The transfer of officers so qualified from the Quartermaster Reserve Corps to the Sanitary Reserve Corps has been consummated.

At the close of the fiscal year June 30, 1921, there was a total of 245 accepted commissions in the Sanitary Reserve Corps, distributed in the various grades as follows: Colonel, 1; lieutenant colonels, 5; majors, 30; captains, 71; first lieutenants, 74; second lieutenants, 64.

There were no Sanitary Reserve officers called to duty for training during the year.

Classification of officers of the Sanitary Reserve Corps and selection for assignment with troops or special units are now being made.

There are now (September 1, 1921) 267 officers in the Sanitary Officers' Reserve Corps, distributed in grades and States as follows:

States.	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.
California			2	5	10	3	20
Colorado				1		1	2
Connecticut		1		1	2		4
District of Columbia			5	3	4	2	14
Florida				1		1	2
Foreign			1	5	1		7
Georgia				1			1
Illinois		2	3	4	6	6	21
Indiana				1		1	2
Iowa				3	1	3	7
Kansas					2	1	3
Kentucky			1				1
Louisiana					1		1
Maryland			2	2	1	2	7
Massachusetts		1	8	7	15	7	38
Michigan			4		5	2	11
Minnesota				5	1		6
Mississippi						1	1
Missouri			1		1	1	3
Montana					2		2
Nebraska				2	2		4
New Hampshire						1	1
New Jersey			1		2	6	9
New Mexico						1	1
New York	1	1	7	13	8	7	37
North Carolina					2		2
North Dakota				1		2	3
Ohio			2	3	5	4	14
Oregon				2		1	3
Pennsylvania				9	4	3	16
Rhode Island				2			2
South Carolina						1	1
Tennessee				1		1	2
Texas				2		2	4
Utah						1	1
Vermont				1			1
Virginia				1		1	2
Washington				1	1		2
West Virginia					1		1
Wisconsin					3	1	4
United States Army			1		1	2	4
Total	1	5	38	77	81	65	267

MEDICAL ADMINISTRATIVE CORPS.

During the year the Medical Administrative Reserve Corps was authorized. Owing to the fact that this corps was not previously authorized by law, applicants qualified for duties of the Medical Administrative Corps were commissioned in the Quartermaster Reserve Corps. The transfer of officers so qualified has been consummated.

At the close of the fiscal year June 30, 1921, there was a total of 466 accepted commissions in the Medical Administrative Reserve Corps, distributed in the various grades as follows: Captains, 134; first lieutenants, 147; second lieutenants, 185.

There were no Medical Administrative Reserve officers called to duty for training during the year.

Classification of officers of this corps and selection for assignment with troops or special units are now being made.

There are now (September 1, 1921) 490 officers in the Medical Administrative Officers' Reserve Corps, distributed in grades and States as follows:

States.	Captains.	First lieutenants.	Second lieutenants.	Total.
Alabama	1	2	1	4
Arizona	1		1	2
Arkansas	1			1
California	15	14	14	43
Colorado			4	4
Connecticut	2	2	4	8
Delaware	1			1
District of Columbia	12	12	4	28
Florida			1	1
Foreign		1		1
Georgia	2		2	4
Idaho	2		1	3
Illinois	3	5	9	17
Indiana		1	6	7
Iowa	2	1	3	6
Kansas			3	3
Kentucky			2	2
Louisiana	1	4		5
Maine			1	1
Maryland		1	4	5
Massachusetts	3	2	15	20
Michigan	3	3	4	10
Minnesota		2	9	11
Mississippi		2	1	3
Missouri	3	6	6	15
Montana	2	1	1	4
Nebraska		2	2	4
New Hampshire	1		2	3
New Jersey	4	5	10	19
New York	13	23	17	53
North Carolina	3	3	2	8
North Dakota			1	1
Ohio	5	6	8	19
Oklahoma		2	3	5
Oregon	1	3	3	7
Pennsylvania	6	8	11	25
Rhode Island		1		1
South Carolina		2	2	4
South Dakota		1	2	3
Tennessee			2	2
Texas	5	2	8	15
Utah	1		1	2
Virginia	1		1	2
Washington	4	7	6	17
West Virginia			3	3
Wisconsin		1	1	2
Wyoming		1		1
United States Army	41	28	16	85
Total	139	154	197	490

The veterinary section of the Officers' Reserve Corps has gained slightly, having increased from 12 majors, 46 captains, 90 first lieutenants, and 177 second lieutenants on June 30, 1920, to 14 majors, 54 captains, 116 first lieutenants, and 188 second lieutenants on June 30, 1921. Appointments were reopened in October, 1920. Since November 11, 1918, 626 appointments have been made, of which 151, or about 24 per cent, were declined. Of 67 commissions offered during the present fiscal year there were 32 declinations, or nearly 50 per cent. The steady increase in declinations is not understood. There is not the interest in the Reserve Corps among civilian veterinarians which might be reasonably expected, and only a limited number of the leading men of the profession are enrolled.

ENLISTED PERSONNEL.

The failure of the act of June 4, 1920, to authorize enlisted men for the veterinary service found the Medical Department on June 30, 1920, with 956 men on hand performing such duties and an

urgent demand for their services from all sections of the Army. The authorized strength of the enlisted force of the Medical Department being 5 per cent of the authorized strength of the Army during the fiscal year 1920–21, has been sufficient to provide for veterinary personnel. The authorized strength after June 30, 1921, becomes 5 per cent of the actual strength of the Army, and the incident reduction renders it increasingly difficult to spare sufficient men for the veterinary service. An increase of the Medical Department allowance to 6 per cent of the Army strength is needed to meet the requirements of the entire Medical Department. Under the provisions of Circular 319, War Department, dated August 25, 1920, enlistments were authorized specifically for the Medical Department (Veterinary Service).

At the date of last report June 30, 1920, there remained in the enlisted force of the Medical Department (Medical, Veterinary, and Dental services), 14,819 men. During the period July 1, 1920, to June 30, 1921, the net loss to the enlisted force amounted to 1,688 men; there remained in the service June 30, 1921, 13,131 men.

In October, 1920, an examination was held for promotion to the grade of staff sergeant, Medical Department. There were 243 applicants for admission to this class; all of those who qualified for appointment were given warrants of the grade.

In January, 1921 (United States), and February, 1921 (foreign), an examination was held for promotion to the grades of master sergeant and technical sergeant, Medical Department. Only former enlisted men of the Medical Department, who during the emergency held temporary commission in the Army, and who upon discharge from their commission had again enlisted in the Medical Department, were eligible for admission to these classes. There were 90 applicants for examination and approximately 95 per cent of this number qualified for promotion to the grade for which they were examined. The names of these noncommissioned officers who qualified in the examination referred to and of those who qualified in the examination held in March, 1920, are still on the eligible list in the files of this office.

In February, 1921, an examination was held for promotion to the grades of technical sergeant, staff sergeant, and sergeant, Medical Department, Veterinary Service; there were 281 applicants for admission to these classes. Those who qualified for the grades of technical sergeant and staff sergeant were appointed; the successful candidates for the grade of sergeant, however, were not appointed, in view of restriction imposed by Circular No. 87, War Department, 1921. The names of the successful candidates for promotion to the grade of sergeant are on the list of eligibles and when the restrictions referred to are removed will be appointed.

In April, 1921 (United States), and May, 1921 (foreign), an examination was held for promotion to the grade of staff sergeant, Medical Department. There were 227 applicants for admission to this class. The successful candidates of this examination, excepting those examined in the Philippine Department, have been appointed; these promotions will be effected when the restrictions imposed by Circular No. 87, War Department, current series, are removed.

DENTAL CORPS.

The Dental Corps has been operating during the past year under the organization outlined in last report. The several changes in Army organization, incident to the act of June 4, 1920, have been met by such modification of dental activities as were required to coordinate the dental service. The most important of these was the establishment in the United States of corps areas to supersede territorial departments and the change in designation of the senior dental officer in charge of the service at each headquarters, from department dental surgeon to corps area dental surgeon—assistant to the surgeon.

The number of war casualty maxillo-facial cases has been greatly reduced during the year and the special service for that type of cases heretofore maintained at General Hospital No. 2 and Columbus Barracks has been discontinued, leaving only Walter Reed General Hospital and Jefferson Barracks with comparatively few of these cases remaining. It is contemplated that those still under treatment at Jefferson Barracks will soon be transferred to Walter Reed General Hospital, where this special service will eventually be allowed to terminate.

During the year dental officers continued on duty with troops in the following countries outside the territorial limits of the United States: France, Germany, Philippine Islands, Panama, Hawaii, China, Alaska, and Porto Rico.

PERSONNEL.

Regular Corps.—There were 196 officers of the Regular Army Dental Corps on duty at the close of the last report, including 1 credited who failed to accept or decline an appointment tendered him in January, 1919. This figure shows a shortage with a total of 102 vacancies in the corps, as the act of June 4, 1920, authorized a quota of 298 dental officers. Under the provisions of this act, examinations were held in July and October at several military stations throughout the country for candidates made eligible through service during the war. As a result of these examinations, 75 officers, including 2 majors, 19 captains, and 54 lieutenants were found acceptable and tendered appointments. Of this number, 2 captains and 5 lieutenants declined, leaving an increase of 68 officers, which raised the total to 264 officers.

The losses occurring during the year were 18 officers, as follows: 1 colonel, 2 majors, 1 captain, and 1 lieutenant retired for physical disability incurred in line of duty; 1 major, 3 captains, and 5 lieutenants by resignation; 1 captain transferred to the Field Artillery; 1 lieutenant discharged, 1 major died, and the pending appointee declined. The number of officers on duty at the close of this report is 250, 4 of whom are retired officers on active duty with Reserve Officers' training camps units.

Temporary officers.—There were 126 temporary officers on duty at the close of last report. This number was reduced by discharge of officers to accept appointment in the Regular Army, and finally by the relief from active duty and discharge of all temporary officers in

December. On account of the shortage of 34 dental officers in the Regular Corps and the needs of the service, authority was requested and obtained for calling 34 Dental Reserve Officers into active duty for a period not to exceed six months. It was found difficult to secure this number of officers for a call to active service for so short a period, but eventually the plan was partially successful and 32 officers accepted. Of this number 3 majors, 3 captains, and 11 lieutenants were officers who had lately been discharged from temporary commissions and recommissioned in the new Dental Reserve Corps. In accordance with specific instructions received from the Secretary of War, all Dental Reserve Officers on active duty were relieved and returned to inactive status on or about June 30, 1921. None of them are on duty at the close of this report.

Reserve Corps (Dental).—See report of Personnel Division.

EQUIPMENT.

Considerable study and investigation has been given during the past year to revision of the standard list of dental equipment and supplies. Changes have been made in the old list by adding items essential to the needs of higher developments in the practice of dentistry and for the completion of certain medical department field units undergoing development. As indicated in the last report, our experiments have been made with the view of modifying field equipment to meet transportation facilities of an army on campaign. Three field units have thus far been developed and authorized as follows: Individual equipment, dental; Dispensary dental equipment and hospital company dental equipment.

The individual equipment consists of two aluminum cases: "A" and "B," each designed to be carried on the belt and by shoulder strap, respectively, or by hand strap, as desired. Case "A" will be carried by all dental officers below the grade of lieutenant colonel. Case "B" will be carried by all enlisted dental technicians below the grade of technical sergeant. These cases carried by dental personnel at all times will make it possible to afford first aid and relief measures anywhere in the zone of advance.

The dispensary dental equipment and hospital company equipment are modifications of the old portable dental outfits reduced to meet the needs of transportation. Each is adequate to the demands for simple operations of reparative dentistry and the latter also for the construction of maxillary splints.

PROFESSIONAL SERVICES.

During the year, the Dental Corps has developed and maintained a high standard of professional service throughout the Army. The quantity of service rendered is creditable, as shown by the accompanying table. This table represents a concrete statement of constructive dentistry accomplished. No attempt is made to show the innumerable preliminary operations required preparatory to the final constructive operations of compound permanent fillings, crowns, bridges, dentures, etc.

The subject of focal infections of dental origin, which has engaged the attention of both medical and dental professions for the past several years, has received due consideration, and group medicine has been practiced throughout the Army wherever possible. This is especially true in our clinics at general hospitals, the larger station hospitals, and at corps area headquarters. In general hospitals, thorough examination of the mouth and teeth of all patients is routine practice. Cases of arthritis, heart lesions, eye disturbances, and others of obscure origin, in fact all cases where oral focal infection may be suspected as an exciting cause, are given thorough X-ray and laboratory examination. Frequent consultations are held with medical officers for purposes of securing cooperative treatment. It is to be regretted that dental service of this type is not available to a greater extent throughout the Army, but with the present inadequate percentage of dental officers in the corps, it is impossible to even permit the assignment of a sufficient number for group service at all the larger stations.

Preventive dentistry also has been consistently followed, as shown by the large number of calcareous deposits removed and prophylactic treatments recorded. Aseptic root canal therapy and filling has been featured and every effort made to eliminate defective technique, the commonest cause of root canal pathology and its resultant foci of infection.

An important innovation in professional activities was made in October, 1920, through the adoption of a policy for the inclusion of precious metals with the supplies furnished free by the Government. Full instructions were published in Circular Letter No. 129, S. G. O., 1920, which directs all stations where laboratory equipment is installed to requisition for and keep a stock on hand of special materials (precious metals). The authority governing the utilization of special materials at Government expense limits its use to that required in the repair of traumatic injuries, incurred in line of duty, for both officers and men, and to certain type of cases specifically described in the circular. Its use is not authorized in the cases of routine practice where plastic filling materials or vulcanite dentures could be utilized. These special materials may be furnished to families of officers and enlisted men, when practicable, at the expense of the individual concerned, the expense to be determined by the cost of the weight of material so used at a fixed rate per grain and made a charge against him payable to the Medical Department of the Army. These accounts are collectable under provisions of existing regulations.

The operation of this policy relieves the dental officer of the necessity of making a charge to brother officers or their families for special materials required in modern practice, and thus terminates an objectionable custom that has existed in the Dental Corps for the past 20 years. Provisions for accounting and auditing the expenditure of special materials were made in Circular Letter No. 149, S. G. O., December 23, 1920. While the system governing the expenditure and the accounting for these materials is necessarily strict, it nevertheless provides means through which full modern dental service may be rendered in legitimate and meritorious cases. It is meeting with hearty approval throughout the Army.

A standardized classification of dental cases and a uniform method of procedure in the treatment of routine cases was published in Circular Letter No. 1, S. G. O., 1921. Cases are classified in groups in the order in which they are considered entitled to treatment. This classification was based on the theory of furnishing the greatest amount of service to the largest clientele. The methods and procedure outlined were the result of careful study, in which the service recommended was in direct harmony and consonance with modern methods of dental practice in civil life. The instructions issued are comprehensive and definite and provide for sufficient latitude to accommodate individual initiative in the professional treatment of cases of varying symptoms, sequelae, etc.

EDUCATION.

Education is believed to be the corner stone of success, the watchword of progress, and the hope for the future. Its attainment appears to be the basic function of the Army during peace. Education and training in the Dental Corps has kept pace with that authorized and carried out in other branches of the military establishment. Under provisions of the act of June 4, 1920, the Medical Department organized several Reserve Officers' Training Corps units in medical, dental and veterinary colleges, respectively. The establishment of Reserve Officers' Training Corps dental units began in the latter part of 1920. The original endeavor was to inaugurate the course of instruction in 10 of the Class "A" schools of the country, selected upon a basis of geographical location. The selected schools were circularized with a view of starting a course during the session of 1920–21. Owing to the lateness of the start—on or about the beginning of the school session—we were able to obtain only 50 per cent of the schools selected. Instruction in the basic course was inaugurated in the following schools: Dental department, St. Louis University; North Pacific Dental College; dental department, University of Pennsylvania; dental department, University of Minnesota; dental department, Northwestern University. Five officers of the Medical Corps were selected as professors of military science and tactics at these dental colleges and 468 dental students were enrolled in the classes. Upon completion of the first college year, representatives from each school were selected and authorized by War Department orders to attend the course of instruction at the Medical Field Service School, Carlisle, Pa.

It is the desire of the Surgeon General to secure the cooperation of all Class "A" dental schools in the country, who have sufficient enrollment of students to meet the requirements of the law and to establish in each a Reserve Officers' Training Corps dental unit. All of the schools have been circularized and invited to enter into the great work and it is believed a majority of them will accept.

Five dental officers of superior grade were ordered to take the short basic field course of instruction at Carlisle, Pa., during the summer, and upon completion to attend the normal course of instruction there for the purpose of preparing them as instructors in Reserve Officers' Training Corps work during the next session of college. Upon graduation from the medical field service school, they were ordered

to the several dental colleges operating the Reserve Officers' Training Corps course as replacement for the medical officers heretofore assigned these institutions as professors of military science and tactics. Four of the five originally selected for this work were taken from the retired list, in accordance with the provisions of the act of June 4, 1920.

Full advantages were taken of the educational facilities offered by the army reorganization act by the selection and transfer of three dental officers of field grade to New York to undergo a postgraduate course of instruction in orthodontia. Upon graduation, these officers will be assigned to important stations, either at general hospitals or headquarters' clinics, and will find a vast field of usefulness open for them. It is hoped to send 3 or 4 carefully selected officers to this course each year, until we have a total of at least 12 specialists in orthodontia available for special assignment at important stations having a large child population.

For the first time a dental officer has been assigned to the Army Medical School, where he is undergoing special instruction in bacteriology and pathology, with a view to development in this special line of work. With the extraordinary opportunities afforded at that renowned institution, through the teaching and assistance of scientifically trained medical officers and the splendid laboratory facilities, it is believed selected dental officers may take up the study and scientific investigation of oral diseases and later establish a dental research laboratory that will prove of value to the service and the public.

TABLE 46.—*Dental service rendered at stations of the United States Army.*

	Number of persons treated.		Number of sittings.		Permanent fillings.		Temporary fillings.		Root canal fillings.	
	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.
Camps	54,813	6,675	100,142	12,074	55,607	5,502	4,637	805	4,312	420
General hospitals	19,135	4,668	46,418	10,931	9,934	2,236	550	386	612	114
Permanent posts	61,801	15,513	110,932	27,740	60,455	10,927	4,366	1,596	5,044	949
Miscellaneous	16,906	8,249	32,184	15,284	15,613	4,695	1,306	784	1,222	319
Base and camp hospitals	6,744	691	11,169	1,192	6,929	660	423	36	654	29
Total in United States	159,399	35,796	300,845	67,221	148,538	24,020	11,282	3,607	11,844	1,831
Total in Canal Zone	4,427	538	7,858	957	2,743	270	669	112	252	13
Total in Philippines	1,637	2,751	6,112	5,027	2,341	1,548	502	184	1,171	149
Total in Hawaii	8,488	882	15,793	1,603	6,933	627	847	79	748	76
Total in United States and possessions	173,951	39,967	330,608	74,808	160,555	26,465	13,300	3,982	14,015	2,069
Germany	11,880	1,258	27,814	2,793	10,123	11,179	759	164	1,188	112
Grand total	185,831	41,225	358,422	77,601	170,678	37,644	14,059	4,146	15,203	2,181
Aggregate total	227,056		436,023		208,322		18,205		17,384	

TABLE 46.—*Dental service rendered at stations of the United States* Army—Continued.

	Crowns.		Bridges.		Dentures.		Extractions.		Calculus removed.		Crowns repaired.		Bridges repaired.		Dentures repaired.	
	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.	Officers and men.	Others.
Camps	772	135	282	81	427	113	19,766	1,970	9,298	1,270	76	13	162	34	91	42
General hospitals	251	48	139	32	65	140	4,185	1,210	3,656	887	41	10	69	19	75	38
Permanent posts	916	284	345	183	595	292	23,632	4,716	13,273	3,208	110	48	262	117	148	108
Miscellaneous	287	125	155	64	224	141	3,750	2,228	3,644	1,550	63	43	84	41	64	41
Base and camp hospitals	104	15	49	13	38	9	3,864	331	1,832	195	61	1	9	4	9	8
Total in United States	2,330	607	970	374	1,349	695	55,197	10,455	31,703	7,110	351	115	586	215	387	237
Total in Canal Zone	30	3	11	....	11	6	918	167	814	68	2	....	6	....	5	1
Total in Philippines	244	46	174	38	112	47	2,967	1,509	3,529	497	34	3	17	12	28	13
Total in Hawaii	96	18	52	7	60	12	3,816	451	1,181	129	5	1	22	....	8	5
Total in United States and possessions	2,700	674	1,207	419	1,532	760	62,898	12,582	37,227	7,804	392	119	631	227	428	256
Germany	170	43	25	11	59	29	3,295	300	3,458	347	22	14	46	23	20	11
Grand total	2,870	717	1,232	430	1,591	789	66,193	12,882	40,685	8,151	414	133	677	250	448	267
Aggregate total	3,587		1,662		2,380		79,075		48,836		547		927		715	

ARMY NURSE CORPS.

NURSING SERVICE.

The following figures show the reduction in the Nurse Corps that has taken place during the year:

	Regular.	Reserve.	Total.
July 1, 1920	1,045	506	1,551
June 30, 1921	704	147	851
Loss	341	359	700

The distribution at the end of the year is as follows:

	Regular.	Reserve.	Total.
General hospitals	186	56	242
Station hospitals	308	82	390
Miscellaneous stations	23	1	24
Nurses under treatment	17	8	25
American Forces in Germany	52	.....	52
Hawaiian Department	28	.....	28
Philippine Department	90	.....	90
	704	147	851

The classification of rank is as follows:

Major, superintendent, Army Nurse Corps	1
Captains, assistant superintendents, Army Nurse Corps	4
First lieutenants, chief nurses, Army Nurse Corps	74
Second lieutenants, nurses	772
	851

The number of nurses who have transferred from the Reserve to the Regular Corps is 30.

There were 49 new appointments to the corps, 28 of whom had had previous service in it. Two members of the corps died during the year.

The record keeping of the office has continued to present many difficulties, as clerical help has been inadequate. The work of returning to the American Red Cross Nursing Service the application papers of the Reserve nurses who had been relieved from active service was up to date on August 15, 1920. During the year applications with efficiency reports of 2,445 Reserve nurses have been returned.

The classification of nurses who served in the World War, by States, is progressing slowly. It has been completed through the letter H. Special record cards have also been prepared for the war roster commission of the State of Iowa, and cards for another separate State's war records commission are now in progress of preparation.

The requests from the Bureau of War Risk Insurance for military records of service and medical histories of nurses have not decreased, nor have the requests for records from the division of rehabilitation of the Federal Board for Vocational Education. During the past year these records have been furnished as follows:

Bureau of War Risk Insurance	1,560
Federal Board Vocational Education	315

With a constantly decreasing clerical staff it is impossible to prevent delays in the return of these records of former service nurses to the offices requesting them.

The preparation of applications for nurses' victory medals has progressed slowly. Eight thousand two hundred and sixteen finished applications have been forwarded to the distributing office in Philadelphia during the year. More than 11,800 forms are yet to be prepared. Since the two field clerks supplied by the Adjutant General's Office to assist in this work have been withdrawn it will take the present staff of nurses detailed to this duty (2), without clerks, more than a year and a half to finish it.

On August 14, 1920, General Orders No. 49, appeared, defining the rights and privileges of nurses under the act of June 4, 1920, section 10 of which provides for relative rank for members of the Army Nurse Corps.

The superintendent of the corps has during the year made inspections of the nursing service of 15 different army hospitals, most of which are in the Middle and Western States. She has also made 15 addresses on the subject of the Nurse Corps to civic and educational organizations not connected with the Army.

DIETITIAN SERVICE.

On July 1, 1920, there were 35 dietitians in the service distributed among 12 hospitals. During the year ending June 30, 1921, 10 dietitians have been appointed and 19 have been discharged. The remaining 26 are distributed among 9 hospitals.

No change has been made in the status of the dietitians during the past year, nor has the rate of pay been changed. A great many applications for appointment have been received, but no additional appointments are approved because of the decreased appropriation. For the same reason it has been found necessary to disapprove requests from some of the station hospitals for the services of a dietitian.

Upon the request of the department surgeon of the Philippine Department for a dietitian service in that department two dietitians have been sent there for duty. One is serving at Sternberg General Hospital and one at the Station Hospital, Fort Mills, P. I. The dietitian service at Tripler General Hospital, Honolulu, Hawaii, has been discontinued, and the two dietitians in the Philippine Islands are the only ones serving outside of the United States.

THE ARMY SCHOOL OF NURSING.

The year ending June 30, 1921, was the third and last year for the students of the original war class of 1918. On July 1, 1920, there were 549 students on active duty or in affiliation. These students were stationed at the Walter Reed General Hospital, the Letterman General Hospital, the Lovell General Hospital, and the Hoff General Hospital. In October, 1920, 18 new students were admitted to the Walter Reed General Hospital, and it is planned in the future to admit classes in October and March to both the Walter Reed and the Letterman General Hospitals. The permanent school will not have an entire enrollment exceeding two hundred students.

The affiliations for the year have been those in psychiatric and public health nursing. A new and valuable affiliation in psychiatry was opened at St. Elizabeths Hospital, Washington, D. C., on April 15, 1921. On February 6, 1921, an affiliation in public health nursing was started with the Instructive Visiting Nurse Society in Washington. These two affiliations were in addition to those already existing. They have the advantage of eliminating the expense of transportation without lowering at all the standard of the training given.

Commencement week for the eastern section of the Army School of Nursing was held at the Walter Reed General Hospital from June 12 to June 17, 1921, inclusive. The graduation exercises were held on the morning of June 16th, and 404 students were presented with diplomas by the Surgeon General. The Rhea scholarship was presented by the Assistant Surgeon General. Addresses were made by the Surgeon General, the dean of the Army School of Nursing, and by Miss Goodrich, the founder and former dean of the Army School.

Commencement for the western section was held at the Letterman General Hospital, San Francisco, from July 10 to July 15, 1921, inclusive. The Surgeon General, the dean of the Army School of Nursing, and the former dean of the school were also present at these exercises, and made the principal addresses. Here the Surgeon General presented diplomas to 108 students.

The number of students in the Army School of Nursing is as follows:

July 1, 1920	549
October 1, 1920 (admitted)	18
Total July 1, 1921 (including members of graduating class whose course of three years was not quite complete)	444

VETERINARY DIVISION.

COMMISSIONED PERSONNEL.

The commissioned strength of the Veterinary Corps has been derived from three sources: The regular Veterinary Corps, the Veterinary Corps of the United States Army (temporary officers),

and the veterinary section of the Officers' Reserve Corps. The fluctuations in this personnel appear in the following table:

TABLE 47.—*Strength of the Veterinary Corps, United States Army, June 30, 1920, to June 30, 1921.*

Grades.	1920.							1921.					
	June 30.	July 31.	Aug. 31.	Sept. 30.	Oct. 31.	Nov. 30.	Dec. 31.	Jan. 31.	Feb. 28.	Mar. 31.	Apr. 30.	May 31.	June 30.
Colonels:													
Regular	0	3	3	3	3	3	3	3	3	4	4	4	4
Temporary	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	3	3	3	3	3	3	3	4	4	4	4
Lieutenant Colonels:													
Regular	2	2	4	5	5	5	5	5	5	5	6	6	6
Temporary	0	0	0	0	0	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	2	4	5	5	5	5	5	5	5	6	6	6
Majors:													
Regular	21	12	17	17	17	17	17	17	17	16	15	15	15
Temporary	6	6	6	3	1	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	27	18	23	20	18	17	17	17	17	16	15	15	15
Captains:													
Regular	22	17	13	28	27	28	29	29	29	29	29	29	29
Temporary	36	36	36	14	7	5	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	1	2	2	2	2	2	2
Total	58	53	49	42	34	33	30	31	31	31	31	31	31
First lieutenants:													
Regular	20	11	29	82	83	83	83	82	82	86	92	92	91
Temporary	97	93	89	33	10	3	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	3	8	8	8	9	10	10
Total	117	104	118	115	93	86	86	90	90	94	101	102	101
Second lieutenants:													
Regular	21	39	11	26	26	25	26	26	26	21	15	15	14
Temporary	56	56	53	28	12	1	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	1	2	3	3	3	1	1
Total	77	95	64	54	38	26	27	28	29	24	18	16	15
Retired	2	2	2	1	1	1	1	1	1	0	0	0	0
Totals:													
Regular	86	84	77	161	161	161	163	162	162	161	161	161	159
Temporary	195	191	184	78	30	9	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	5	12	13	13	14	13	13
Retired	2	2	2	1	1	1	1	1	1	0	0	0	0
Total	283	277	263	240	192	171	169	175	176	174	175	174	172

All Regular officers holding temporary commissions were returned to their normal grades on July 1, 1920. The discharge of temporary officers progressed until December 31, 1920, when the last were released. The reduction of veterinary officers from 283, on June 30, 1920, to 172 on June 30, 1921, was not accompanied by any relative reduction in the duties devolving on the Veterinary Corps. Thirteen Reserve officers were also relieved from active duty on July 1, 1920, leaving 159 officers in the service. The number of animals remained constantly between 75,000 and 80,000. Consequently the shortage of officers which existed a year ago has become accentuated. The present actual strength of the Veterinary Corps of 159 officers is esti-

mated as adequate for an army of approximately 36,000 animals. This inadequacy of veterinary officers has been brought to the attention of the War Department repeatedly during the past year in recommendations that Reserve officers be called to active duty in sufficient numbers to reinforce the personnel of the regular corps. Such requests have been uniformly disapproved and the policy enunciated as expressed in Circular 420, W. D. 1920, that the number of veterinary officers on duty shall at no time exceed 175, the strength of the corps established by the act of June 4, 1920. The inability to utilize the services of Reserve officers has made it necessary to deny urgent requests from practically all branches of the service for veterinary attendance. Service has been wholly abandoned at several stations having enough animals to justify a veterinary officer if one were available. In a number of cases specially qualified veterinary sergeants have been assigned to stations having no veterinary officers. These sergeants have reported to the surgeon and have been instructed to provide for veterinary sanitation, inspection of shoeing, forage and meats, and minor treatment of sick. As laymen, their professional activities have been necessarily restricted within certain limits and within these limits this expedient has served to meet certain, but by no means all the requirements of the veterinary service.

It will appear from the following that the shortage of veterinary officers is a fundamental defect correctible only by legislation increasing the strength of the Veterinary Corps. The only alternative measure of relief is a material reduction in the animal strength of the Army.

In order to secure figures showing the requirements of the Army in veterinary officers, it is necessary to revert to conditions in 1916. At that time regimental veterinarians were provided for the mounted service and all other veterinary attendance was furnished by the Quartermaster General in the form of civilian veterinarians employed under contract.

The Army had about 90,000 animals and employed 271 veterinarians as follows:

Cavalry and Artillery	42
Animal inspectors	6
Contract veterinarians	125
Meat inspectors	6
Bureau of Animal Industry veterinarians loaned to the Army	11
National Guard veterinarians	81
	271

These figures are approximate because of incomplete records, but they represent the minimum. The service rendered by these veterinarians was for local stations and units. There were no senior officers for supervisory duties, no veterinary divisional organizations, the meat inspection service of camps was nonexistent, there was no veterinary laboratory service, no veterinary school, and no Reserve Officers Training Corps units. Two hundred and seventy-one men were required to render service of that character and yet when the veterinarians were turned over to the Medical Department by the provisions of the national defense act, a maximum of 118 veterinary officers was authorized to take over all the duties which had formerly demanded the full time of 271. The national defense act provided

for reserve veterinarians, an anomalous position carrying no rank, but providing for the pay and allowances of second lieutenants. There is no record of a professional man having accepted such an appointment. The act of June 4, 1920, provided for 175 officers, which was a material increase over 118, but omitted the Reserve veterinarians. The only fair basis of comparison is with the number of veterinarians employed prior to June 3, 1916, when the only restriction on the number was the actual needs of the service and the availability of funds for their compensation. There is only one of two conclusions to be reached, either that the veterinary service for 90,000 animals was grossly overmanned in 1916 with a personnel of 271, which seems most improbable, or that it is far below strength at the present time with 175 officers trying to meet the demands of 75,000 animals with the numerous incidentals added as a result of the organization and development of the service.

The reorganization of the Veterinary Corps as provided in section 10 of the act of June 4, 1920, has been completed. Examinations for promotion to the various grades based on years of service were completed in July, 1920, and promotions effected. The examinations for the permanent appointment of temporary officers which were held throughout the Army resulted in the addition of 17 captains, 45 first lieutenants, and 27 second lieutenants, but did not fill all the vacancies, which were further increased by subsequent losses which numbered 16 on August 1. With the issue of A. R. 605–20, urgent request was made to the War Department to authorize an examination to be held on June 20, 1921, for appointments to the grade of second lieutenant. This was disapproved with the statement that until the provisions of pending legislation are known and any necessary readjustments as to the strength of the commissioned personnel of the various branches, required by the provisions thereof have been determined upon, no action can be taken on the request. Consequently the release on July 1, 1921, of 13 Reserve officers, temporarily on active duty, left available a total of 159 officers after that date. The changes in the personnel of the Veterinary Corps Regular Army are shown below:

TABLE 48.—*Changes in the Veterinary Corps, Regular Army, June 30, 1920, to June 30, 1921.*

	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.
June 30, 1920			7	16	20	43	86
Losses:							
Resignations	0	0	0	0	4	3	7
Retirements	0	0	1	1	2	0	4
Discharges	0	0	0	0	1	3	4
Transferred to Q. M. Corps	0	0	0	0	0	1	1
Total	0	0	1	1	7	7	16
Appointments	0	0	0	17	45	27	89
Net gain	0	0	0	16	38	20	73
June 30, 1921 [1]	4	0	15	29	91	14	159

[1] The figures shown on this line as distributed by rank, do not agree with the totals by rank obtained by adding the figures on the line above to those on the line for June 30, 1920; the differences are caused by the changes in rank that occurred as the result of promotions made in accordance with the act of June 4, 1920.

TABLE 49.—*Enlisted personnel of the Medical Department (Veterinary Service) June 30, 1920, to June 30, 1921.*

Grades.	June, 1920.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Dec., 1920.	Jan., 1921.	Feb., 1921.	Mar., 1921.	Apr., 1921.	May, 1921.	June, 1921.
Master sergeants	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Technical sergeants	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	5	5	5
Staff sergeants	34	33	29	28	25	21	19	19	19	25	25	23	24
Sergeants	68	146	140	142	115	111	103	105	101	92	89	90	87
Stable sergeants[1]	97	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Corporals	31	24	23	24	21	19	18	21	26	25	24	31	32
Cooks[1]	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Horseshoers[1]	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saddlers[1]	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mechanics[1]	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Privates first class	236	207	200	176	166	158	150	155	158	156	156	187	218
Privates	459	446	415	420	446	450	496	540	557	605	659	589	546
Total	956	856	807	790	773	759	786	840	861	908	958	925	912

[1] Stable sergeants were designated as sergeants; cooks, horseshoers, saddlers and mechanics were designated as privates first class or privates with the appropriate specialist ratings on July 1, 1920, under the provisions of General Orders, No. 36, War Department, 1920.

TABLE 50.—*Character of gains and losses to the enlisted force of the Medical Department (Veterinary Service), June 30, 1920, to June 30, 1921.*

Aggregate, July 1, 1920		956
Gains, July 1, 1920, to June 30, 1921:		
Enlisted	331	
Reenlisted	187	
Transferred from the line	201	
Rejoined from desertion	8	
Other gains	248	
Total		975
Total to be accounted for		1,931
Losses, July 1, 1920, to June 30, 1921:		
Furloughed to Reserve	0	
Discharged—		
By order[1]	578	
By General Court-Martial Order	9	
For disability	6	
For reenlistment	97	
Retired	1	
Deserted	51	
Transferred to the line	64	
Died—		
Killed in action	0	
Of wounds	0	
Of disease	4	
Other losses	209	
Total		1,019
Remaining on duty June 30, 1921		912

Examinations for promotion to the grades of technical sergeant, staff sergeant, and sergeant were held throughout the Army on February 14, 1921. As a result, 5 technical and 24 staff sergeants were appointed. Circular 87, W. D. 1921, suspending promotions in grades junior to that of staff sergeant, prevented the appointment of the men who qualified as sergeants, but created a waiting list from which it is proposed to make appointments after July 1. Circular 41, W. D.

[1] Including those discharged at expiration, term of service.

1921, standardizes the system of examinations for all noncommissioned grades of the Medical Department and will be operative for subsequent promotions.

The requirements of the act of June 4, 1920, as regards enlisted specialists are complied with in Circular Letter 135, S. G. O., 1920, classifying the specialists peculiar to the Veterinary Service. Provision is made for the ratings of sanitary technicians, veterinary; surgical technicians, veterinary; dispensary technicians, veterinary; clinical technicians, veterinary; and laboratory technicians, veterinary, in all classes from the first to the sixth. In addition to the foregoing, enlisted men of the Veterinary Service are eligible for appointment to other appropriate specialist ratings common to two or more branches of the service, such as horseshoers, cooks, mechanics, etc. This office has made allotments of specialist ratings to the independent commands and designated for the Veterinary Service a prorata quota of the general allotment of specialists to each department and corps area. The specialist appointments of the Veterinary Service are shown in the following table:

TABLE 51.—*Enlisted specialists, Medical Department (Veterinary Service), June 30, 1920, to June 30, 1921.*

Ratings and classes.	1920							1921					
	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.
First class:													
Medical Department (veterinary) technicians													
All other ratings													
Second class:													
Medical Department (veterinary) technicians										1	1	1	1
All other ratings													
Third class:													
Medical Department (veterinary) technicians						1	2	2	2	2	3	3	4
All other ratings													
Fourth class:													
Medical Department (veterinary) technicians						2	5	6	6	7	6	5	13
All other ratings		12	16	11	13	22	31	36	41	38	37	40	37
Fifth class:													
Medical Department (veterinary) technicians													5
All other ratings		3	3	4	7	6	5	4	4	4	6	5	8
Sixth class:													
Medical Department (veterinary) technicians						4	9	12	15	15	19	23	45
All other ratings		11	17	20	19	31	41	56	47	44	50	48	36
Total, Medical Department (veterinary) technicians	0	0	0	0	0	7	16	20	23	25	29	32	68
Total, all other ratings	0	26	36	35	39	59	77	96	92	86	93	93	81
Grand total	0	26	36	35	39	66	93	116	115	111	122	125	149

GENERAL ACTIVITIES.

Service of the interior.—The following tabulation shows the distribution of veterinary officers on June 30, 1921, and the nature of the duty performed. The figures showing animal strength are consolidated from all stations at which veterinary service was rendered, including those having a veterinary noncommissioned officer but no officer. In several instances corps area or station veterinarians rendered service at a number of stations; in one instance, 10; and in another, 8.

Place and nature of duty.	Animals.	Officers.	Place and nature of duty.	Animals.	Officers.
Surgeon General's Office		2	Reserve, intermediate and area depots (chiefly food and forage inspection)	139	17
Department and corps area veterinarians (8 at corps area headquarters, 1 each at headquarters Hawaiian, Philippine, and Canal Zone Departments and American Forces in Germany)		12	Remount purchasing headquarters	87	5
Instructors, veterinary Reserve Officers' Training Corps units		3	Quartermaster intermediate (remount) depots	4,131	6
Instructors, veterinary school of meat and dairy hygiene and forage inspection		2	Independent stations	4,444	10
Students, veterinary school of meat and dairy hygiene and forage inspection		7	Stations under corps area commanders	54,164	72
Veterinary laboratory service		4	Hawaiian Department	2,689	4
Transport Dix		1	Philippine Department	5,040	5
			Canal Zone Department	1,501	3
			American Forces in Germany	2,099	3
			Unassigned, on leave		2
			Total	74,294	159

Administration.—The Veterinary Division of this office has been administered during the year along the general lines previously laid down. The office personnel has been reduced to one medical and two veterinary officers, requiring considerable readjustment of the various functions pertaining to the division. This personnel is adequate for routine administrative duties in time of peace, but at present and, it is anticipated, for a considerable time in the future the additional labor incident to the revision of regulations and of supply and equipment tables makes it difficult to keep the work of the division up to date.

The revision of Special Regulations No. 70 which will appear as Army Regulations for the veterinary service is progressing satisfactorily, and it is believed that publication of the pamphlets dealing with the service of the interior will be possible during the next six months. This work has included the revision of practically all the veterinary blank forms. Considerable confusion and lack of coordination exists and will continue to exist on account of the incomplete and elementary character of Special Regulations No. 70 and the unsatisfactory condition of the blank forms now in use. The publication in mimeograph form and issue to the veterinary officers of the Veterinary Bulletin has continued twice a month with manifest advantage.

The last of the general veterinary inspectors who were on duty during the war, reporting direct to this office, were relieved from this detail in July, 1920. The policy advocated by this office of not discouraging veterinary officers in the practice of their profession among civilian animals, provided that such practice does not interfere with

the performance of military duties, does not entail expense to the Government, the expenditure of military supplies, or the maintenance of an office by a veterinary officer outside his military station, has been approved by the Secretary of War and published to veterinary officers.

The detail of a veterinary officer as assistant to the surgeon at the headquarters of departments and corps areas was officially approved November 2, 1920. Senior officers of the Veterinary Corps have been assigned to all such stations serving the twofold purpose of developing their individual capacities in duties appropriate to their grades and in organizing and coordinating the activities of subordinate veterinary officers. In addition all department and corps area veterinarians are required to render professional service at the headquarters and, when practicable, at stations in the vicinity.

In connection with the coordination division of this office, tables of organization for the Veterinary Service of the Infantry and Cavalry divisions for peace and war have been completed and received the approval of the Secretary of War. Work is now in progress on the hospital units for war conditions, which include the veterinary evacuation, veterinary general, veterinary convalescent, and veterinary station hospitals. The principal changes in the organization of the Veterinary Service of the division as shown in the new tables consist of the replacement of the mobile veterinary section by the veterinary company with identical functions and its incorporation into the medical regiment with the attachment of the division veterinarian and his enlisted personnel to the office of the division surgeon.

The need of a consolidated veterinary service for the animals at Washington and adjacent stations has been met by the authorization of an attending veterinarian with station in Washington who reports direct to the Surgeon General.

Equipment and supplies.—The revision of the veterinary items appearing on the list of Standard Medical Department Supplies has been completed and the veterinary supply tables distributed to the service. Tables of allowances for veterinary detachments, companies, and hospital units are now being prepared. With the individual equipment of the officer and enlisted man and including unit equipment, there will be necessary a large amount of development work. This logically devolves on the experimental laboratory at the Medical Field Service School at Carlisle. The more urgent items include the belt for officers, pouch or belt for noncommissioned officers and other enlisted men, field chests, animal ambulances, and leading apparatus. A request has been recieved from the Chief of Staff for the development by this office of a first-aid packet or pouch for rendering first aid and treating minor injuries of animals.

Hospitalization.—The situation existing at the divisional camps regarding the location of the veterinary hospital at the remount depots has undergone no physical change. The remount depots have steadily diminished in size through the issue of the animals to the troops, resulting in relatively slight demand at the depots for veterinary service, while the service of the camps has become paramount. In consequence, the control and operation of the veterinary hospital has passed into the hands of the camp veterinarians through action of the local authorities and it has become possible for

the camp veterinarians to organize a veterinary service for the entire station, including the remount depot with a veterinary hospital as its nucleus. This is the logical solution of an undesirable situation and has unquestionably resulted in a more efficient veterinary service, accompanied by material economy in personnel. There remains one divisional camp—Travis—having no station hospital, and the sick animals of the camp, which has a strength of 5,329, are cared for in scattered veterinary dispensaries. The hospital at the camp remount depot (now Corps Area General Depot No. 2), although adequate and well equipped, is utilized for the depot animals only, numbering 369.

There have been no material changes other than local repairs and maintenance in the temporary hospital construction available at the different camps. At the request of the Construction Division, a memorandum was submitted November 17, 1920, covering the probable hospital needs for four years as the Army was organized on that date. This estimate included hospitals of 250 capacity at each of nine divisional camps and at Fort Bliss, one of which should be a veterinary general hospital, and accommodations at 14 stations on the border in addition to the present hospitals at the Quartermaster intermediate (remount depots), service schools, and the larger posts. The reduction and concentration of the Army will necessarily reduce these requirements materially.

A canvass was completed June 1, 1920, of the veterinary hospitals constructed at permanent stations prior to the war and which are still in operation. These hospitals, the type of construction, and the capacity in patients is shown below:

	Capacity.
Fort Ethan Allen, Vt.—Brick standard type. Office, dispensary, and operating room	38
Fort Myer, Va.—Brick standard type. Office, dispensary, and operating room.	7
Fort Oglethorpe, Ga.—Brick standard type. Office, dispensary, and operating room; frame isolation structure	42
Fort Des Moines, Iowa.—Brick standard type	38
Fort Riley, Kans.—Stone standard type. Office, dispensary, and operating room	38
Fort Sam Houston, Tex.—Brick standard type. Two buildings, one 200 by 30 feet and one 85 by 30 feet. Operating room 30 by 30 feet	77
Fort D. A. Russell, Wyo.—Brick standard type, 150 by 35 feet	41
Front Royal, Va.—Group of brick stables	192
Fort Keogh, Mont.—Frame construction. Building 200 by 26 feet, dirt floor, no drainage; dispensary and dressing floor	26
Fort Reno, Okla.—Frame construction. Building 60 by 195 feet. Office, dispensary, and operating room. Isolation shed 12 by 30 feet, convalescent shed 20 by 130 feet	131
Fort Clark, Tex.—Frame construction. Building 60 by 24 feet. Office, dispensary, and operating room	6
Fort Ringgold, Tex.—Frame construction. Building 28 by 85 feet. Office, dispensary, and operating room	18
Fort Brown, Brownsville, Tex.—Frame construction. Building 24 by 220 feet, building 18 by 18 feet. Office and dispensary	58
Fort Bliss, Tex.—Frame construction. Building 168 by 35 feet. Office, dispensary, and operating room	32
Fort Huachuca, Ariz.—Frame construction. Office, dispensary and operating room	6
Fort Benj. Harrison, Ind.—Frame construction. Office, dispensary, and operating room, apparently an old stable	66
Presidio of San Francisco, Calif.—Frame construction. Dispensary and operating room. Old and dilapidated	16

	Capacity.
Schofield Barracks, Hawaii.—Frame construction. Two buildings of rough boards. Both have office, dispensary, operating room	17
Camp Stotsenburg, P. I.—Concrete building 195 by 35 feet, frame shed 48 by 30 feet, and frame shed, concrete floor, 33 by 15 feet	43
Fort Wm. McKinley, P. I.—Frame construction. Two buildings	50
Land transportation, Manila, P. I.—Frame construction. Building 128 by 35 feet; building 128 by 25 feet. Office, dispensary, and operating room	76

The hospital at Fort Clark, Tex., was destroyed by fire September 1, 1920, and that at Fort Reno on January 7, 1921.

The Secretary of War approved an expenditure not to exceed $3,000 from the appropriation of barracks and quarters for the fiscal year 1921 to provide the necessary labor and such material as could not be furnished from supplies on hand for construction of a standard veterinary hospital, cantonment type, at Fort Clark, Tex., and also an expenditure not to exceed $10,000 for the construction of a building containing an office and an operating room of permanent type at Fort Reno, Okla.; this building being a unit in the block plan of a station veterinary hospital for 100 patients.

Action on urgent requests for hospital construction at Fort Sill, Okla., and Fort Keogh, Mont., has been suspended until estimates are submitted for the fiscal year 1923.

Instruction and training.—Some progress is apparent in the development of a veterinary instruction and training program as an integral part of this work for the entire Medical Department. A veterinary officer has been assigned to the Medical Field Service School, Carlisle, Pa. He maintains the veterinary station service and gives instruction in veterinary sanitation, animal management, and equitation to all student officers of the Medical Department as a part of the basic course. Reserve officers who may be hereafter accepted for appointment in the Veterinary Corps will undergo a four months' basic training at the school prior to final commissioning as contemplated in A. R. 605–20.

The Veterinary School of Meat and Dairy Hygiene and Forage Inspection authorized by Circular 271, W. D. 1920, has been largely reorganized and put on a more efficient basis. It has had a very successful year. Two classes have been graduated, one on December 15, 1920, and one on June 15, 1921, with a total of 19 officers and 28 enlisted men all of the Regular Army. All of the enlisted graduates who were reported as possessing suitable qualifications have been assigned for duty at stations having need of veterinary service but which are too small to justify the detail of a veterinary officer. They thus serve in a measure to relieve the shortage of veterinary officers.

The establishment of the essential and all important unit in the veterinary training program—that is, a school at a large veterinary hospital—has not been pushed, in view of the unsettled condition of the service and the difficulty in selecting a location which may present reasonable prospects of being permanent. The need for such a school for both officers and enlisted men is constantly apparent.

Instructions and schedules for the operation of Reserve Officers' Training Corps units at veterinary schools were developed in this office and published. Authority was granted for the establishment of four units and applications were received from five colleges, but officer instructors were available and were assigned to three only, i. e.,

Cornell University, Kansas State Agricultural College, and Ohio State University. The attendance at the veterinary departments of these institutions and the enrollment in the Veterinary Reserve Officers' Training Corps units is shown in the following tabulation:

	Cornell University.	Kansas State Agricultural College.	Ohio State University.	Total.
Enrolled in college (consolidated for four classes)	70	63	106	239
Enrolled in Veterinary Reserve Officers' Training Corps unit	51	34	56	141

From the senior classes at these institutions a total of 20 graduates of 1921 have been commissioned as second lieutenants in the Veterinary Reserve Corps.

Veterinary officers have continued to act as instructors for officers and enlisted men of the line at the special service schools of the mounted branches as noted in the last annual report.

LABORATORY SERVICE.

Veterinary officers have been on duty during the year 1920–21 at the laboratory of the Army Medical School and at the sixth, eighth, and ninth corps area laboratories. The officer assigned to the ninth corps area was relieved July 20 and his duties have since been performed by a medical officer.

The veterinary section of the laboratory of the Army Medical School manufactures all the mallein and infectious abortion bacterin used in the Army, and furnishes other laboratories with glanders, dourine, and infectious abortion antigen for use in performing official tests for those conditions. Considerable original work has been done along the lines mentioned in last year's report.

Influenza vaccine.—Nothing of material worth has been added to the sum total of our knowledge of "shipping fever" and its control. During the year the veterinary section of the Army Medical School continued to prepare and issue the mixed-infection influenza bacterin containing the following organisms from freshly isolated cultures:

Streptococcus equi (Schutz), 5 strains.
B. bipolaris equisepticus.
B. paratyphosis (b).
B. enteritis (Gærtner).

The bacterin was intended for use as a prophylactic agent with animals susceptible to "shipping fever," which may or may not have been exposed to infection. Treatment consisted in three graduated doses put up in 2, 4, and 6 cubic centimeter ampules to be administered at intervals of five days. During the year 2,844 full treatments and 336 first doses, or a total of 8,868 doses, were issued. The results obtained have been disappointing, mainly through our inability to carry out the course of three treatments in newly purchased animals prior to shipment. It is evident that much more work will have to be done before "shipping fever" is controlled. The veterinary section of the laboratory, Army Medical School, will continue work along this line.

Infectious abortion serum.—The production of an antiserum for use in connection with the control of equine infectious abortion was started in February, 1920. Two horses were selected at Front Royal and a series of subcutaneous injections begun, but continuance of the project was handicapped by the transfer of the laboratory from Philadelphia to the Army Medical School, Washington, D. C., in March, 1920. It was decided after a number of subcutaneous injections had been given that a serum of greater potency might be produced by changing the method of the administration of the bacterial suspension to the intravenous route, and incidentally in so doing to prevent the objectionable development of focal abscesses which had followed upon the subcutaneous method of injections. A scheme of injections was therefore prepared and consistently adhered to beginning November 10, 1920, and continuing to February, 1921. Thirty injections were given in this manner and a supply of approximately 10 liters of serum prepared and preserved.

In commenting upon this project it must be stated that it was begun at a time when the Army breeding stations were all suffering from the effects of abortion infection, when all possibilities which would assist in combating the disease were being utilized, and while greatest reliance was placed upon the use of equine infectious abortion bacterin as the most efficient aid to control (Good-Kentucky Agricultural Exp. Station Bull. No. 204, Sept. 1, 1916), the possibility of utilizing a potent antiserum, if such could be produced, was not overlooked. The highly satisfactory results obtained from the use of the bacterin, however, leaves little if any prospect of improving the efficiency of the means of control by utilizing a costly antiserum, and it would appear, therefore, that there is no need for continuing this project further than to determine its relative potency as a matter of scientific interest.

TABLE 52.—*Summary of veterinary laboratory work for the calendar year 1920 (continental United States).*

	Species.	Total examinations made.
1. Clinical pathology:		
Blood	Horse	9
	Guinea pig	64
	Rats (wild)	25
Urine	Horse	1
Feces	do	1
Cutaneous lesions—		
For mange parasites	do	18
For ringworm parasites	do	13
For B. necrophorus	do	11
For dermatocoptes cuniculi	Rabbit	4
For ticks	Dog	1
Rabies	Horse	2
	Dog	5
	Monkeys	5
2. Pathological anatomy:	Sheep	1
Autopsies	Guinea pigs	129
	Rabbits	47
	Rats	8
	Mice	7
Histological specimens mounted		10

TABLE 52.—*Summary of veterinary laboratory work for the calendar year 1920 (continental United States)*—Continued.

	Species.	Total examinations made.
3. Bacteriology:		
Blood—		
For B. anthracis	Horse	15
For B. bipolaris septicus	do	2
For other organisms	do	5
Pus, exudates, etc.—		
For B. preisz nocard	do	3
Autogenous bacterin	Dog	1
	Horse	36
Nature of infection	do	9
For other organisms—		
Tetanus	do	1
B. botulinus	do	2
B. abortus	do	21
B. mallei	do	3
Autopsies, total original cultures from	Cow	1
Other cultures made—		
B. welchii	do	2
	(Milk)	1
B. anthracis	Soil	4
	Forage	3
4. Serology:		
Agglutination tests—		
Glanders	Horse	103
Equine infectious abortion	do	104
Complement fixation tests—		
Glanders	do	368
Equine infectious abortion	do	1,957
Dourine	do	294
For others—Potency	do	8
5. Chemistry:		
Urine	do	1
Meats and meat food products—		
Frozen beef		1
Mutton		3
Forage		1
6. Animal inoculations: Bacterial and other strains necessary for use in laboratory work maintained by animal inoculations.		
7. Procedures not otherwise listed (biologics, manufactured and issued):		
Intradermic mallein, doses	[1] 373,375	[2] 399,200
Ophthalmic mallein, doses	[1] 13,440	[2] 13,440
"Shipping fever" bacterin, treatments	[1] 2,841	[2] 1,382
Glanders antigen	c. c. [1] 285	[2] 90
Equine infectious abortion bacterin	c. c. [1] 6,226	[2] 6,226
Autogenous bacterin, treatments	[1] 12	[2] 12
Infectious abortion antigen	c. c. [1] 750	[2] 200
Positive equine infectious abortion serum	c. c. [1] 250	[2] 25
Equine infectious abortion antiserum	c. c. [1] 2,500	([2])

[1] Manufactured. [2] Issued.

ANIMAL TRANSPORT SERVICE.

A veterinary detachment of one officer and enlisted assistants has been assigned to the United States Army Transport *Dix* during the entire year.

SERVICE WITH REMOUNT ACTIVITIES.

The purchase of animals was in active operation during the first half of the calendar year after which it became greatly curtailed. All the animals purchased were horses. The reports received in this office show the following figures relative to numbers inspected and accepted, with a comparison of the results in different purchasing zones:

Purchasing point.	Animals examined.	Animals accepted.	Per cent of rejections.
Oklahoma City	7,631	1,845	75
Kansas City	6,890	3,714	46
Lexington	4,316	1,749	59
Front Royal	3,053	1,874	38
Boise	1,654	653	60
Sacramento	1,078	517	52
Fort Robinson	196	144	26
Total	24,818	10,496	51

Of the rejections, about 75 per cent were for failure to come up to specifications, and 25 per cent for pathological reasons.

Veterinary officers were assigned to purchasing boards operating in the five purchasing zones, reaching a maximum of 16 in January, 1920. Purchasing was also maintained at two remount depots. The veterinary personnel of the boards was gradually reduced and the work taken over in the fall of 1920 by the veterinarians of the remount zones. The latter were assigned at the request of the remount service not only for purchasing duty but for service in connection with the remount breeding program for improving the type of animal available for sale to the Army. The zone veterinarians are called on to examine the Government stallions placed with civilians for breeding purposes, to keep in touch with their care and handling and to examine civilian mares and colts and to advise with their owners in securing the highest degree of cooperation and the best results in their work.

Quartermaster intermediate (remount) depots.—The veterinary service at the four remount depots—Front Royal, Forts Reno, Robinson, and Keogh—is maintained by six veterinary officers and enlisted veterinary detachments. This service is similar to that of a station, but is further concerned with the receipt and handling of newly purchased animals and colts and with breeding operations. Excellent results have followed the efforts to eliminate contagious abortion especially at Fort Reno, discussed under that heading in this report.

SERVICE IN DEPARTMENTS AND CORPS AREAS.

First corps area.—Veterinary service is maintained regularly at two stations by two veterinary officers. The corps area veterinarian acted as attending veterinarian of all commands within the immediate vicinity of the headquarters, including the coast defenses of Boston Harbor, and made sanitary inspections at these stations and at the Reserve Officers Training Corps units within the corps area. This resulted in the correction of numerous minor defects and the mallein testing of all the animals once during the year. The animals at Fort Ethan Allen and Camp Devens were mallein tested twice. The post veterinarian at Fort Ethan Allen conducted a school for stable sergeants and horseshoers of the line.

Second corps area.—The second corps area, as established in September, 1920, included four stations provided with veterinary service. This service was subsequently reduced to the veterinary officer at corps area headquarters, who serves as attending veterinarian for New York Harbor, and the service at Camp Dix, including the first

division, with a total of five officers. The corps area veterinarian reports the chief causes of admission on sick report as harness and saddle galls, due to ill-fitting and dirty equipment, wounds from kicks and picked-up nails, thrush, due to ill-drained standings and faulty shoeing, and indigestion from dietetic errors. Practically all these conditions are preventable, and the remedy lies in proper instruction of the enlisted personnel in animal management. Ignorance of these duties is widespread. At Camp Dix one veterinary officer has devoted practically all of his time to instructing men of the line in horseshoeing and saddlery. The corps area veterinarian reports that the methods of inspecting animals for condemnation are hurried and inaccurate, and that the services of the veterinary officer accompanying the inspector do not appear to be utilized to the full extent. He urges that the veterinary officer should be the one to recommend the condemnation and disposal of public animals to an inspector, for he alone is in a position to acquaint himself with the facts of the case. Although the stations in northern New York have an aggregate of several hundred animals, the shortage of veterinary officers has made it impossible to provide needed veterinary service.

Third corps area.—Veterinary service was provided at the headquarters and at four stations, including the Seventh Division at Camp Meade, with a total of 7 officers. It is reported that the shortage of veterinary officers occasioned the employment of civilian veterinarians, whose services were costly. The transfer of the control of the veterinary hospital at the camp remount depot to the camp commander and its administration by the division veterinarian has resulted in marked improvement.

Fourth corps area.—Seven veterinary officers were on duty at the corps area headquarters at three stations, including Camp Jackson and the Fifth Division. About the time Camp Gordon was abandoned, conditions were most deplorable because of an extensive epidemic of dermatitis gangrenosa, which is discussed in this report under that heading. The corps area veterinarian states that the shoeing and the preparation of the feet were generally poor, due to incompetent or no horseshoers. Horseshoeing schools have not proved entirely satisfactory because unsuitable men were selected for instruction. Veterinary officers are required to act as instructors, but do not control the instruction nor prescribe the curricula. The systems at different schools lack uniformity, and a session of three months is entirely too short. He recommends that a school for horseshoers be established for the entire Army, operated by the veterinary service and maintaining a course of nine months duration.

Fifth corps area.—Veterinary service was rendered at the headquarters and two stations by four veterinary officers. Officers are reported individually as efficient, but each one performing the duties which should ordinarily devolve on two, with no prospect of relief, materially interferes with the quality of the service rendered. The horseshoeing school at Camp Sherman, operated by the camp veterinarian, is a model institution of its kind.

Sixth corps area.—Seven veterinary officers were on duty at the headquarters at Camp Grant, including the Sixth Division, and at the corps area laboratory at Fort Sheridan. Fort Wayne, with 225 animals, should have a veterinary officer, but none was available.

A veterinary sergeant was assigned to this station for a few months, but he secured his discharge, and it has been impossible to replace him.

Seventh corps area.—Five veterinary officers were assigned to the corps area headquarters, Fort Des Moines, and Camp Pike, including the Third Division. A veterinary sergeant was on duty at Fort Snelling, with 135 animals.

Eighth corps area.—Veterinary service was maintained at 22 stations, including the corps area headquarters, the Second Division at Camp Travis, the remount depots at San Antonio and Fort Bliss, and the corps area laboratory, by a total of 33 officers. Due to the shortage of officers, veterinary enlisted men are assigned to four stations, functioning under the station surgeons. Forty-nine veterinary officers is the minimum number which should be assigned to this corps area. The enlisted personnel has also been wholly inadequate, and at many stations enlisted men of the line and Quartermaster Corps have been detailed to assist in the care and treatment of sick animals, with very unsatisfactory results. Thorough mallein testing and improved sanitation have resulted in a marked diminution in the incidence of communicable diseases. Hospitals are reported as inadequate and unsuitable. Schools for horseshoers have been operated at nearly all stations. While the instructors are veterinary officers, the curriculum is prescribed by the Quartermaster Corps. It is recommended that these schools be conducted wholly by veterinary officers and that a minimum course of nine months be required.

Ninth corps area.—Nine veterinary officers were on duty at five stations including corps area headquarters and the Fourth Division at Camp Lewis. The corps area veterinarian acts as attending veterinarian for all stations in the vicinity of San Francisco. Service is rendered at the stations pertaining to the coast defenses of Puget Sound by a veterinary officer from Camp Lewis at a monthly visit. The report of the corps area veterinarian comments on the large number of disabilities due to defective stable management and other preventable causes. It would seem that his office is deprived of accurate information relative to sanitary conditions, because no routine sanitary report is received from the various stations. This is an inherent defect due to the present requirements of Special Regulations No. 70 par. 87½, directing that the monthly sanitary report be filled at the station.

Hawaiian Department.—Veterinary service was rendered by five officers, of whom two are stationed at headquarters in Honolulu and three at Schofield Barracks. There were no outbreaks of communicable disease, and all public and private animals are mallein tested semiannually. A small veterinary hospital was completed at Fort Armstrong in May, 1920. A school for farriers and horseshoers is operated at Schofield Barracks, and the three veterinary officers are all utilized as instructors.

Philippine Department.—Six veterinary officers were assigned, one at department headquarters, two in China, and the remainder at camps and posts. The contract for the purchase of meats at Tsingtau, China, expires June 30, 1921, and the veterinary officer on duty at that place will be returned to the Philippine Islands where his services are required. The prevalence of communicable diseases is discussed

under the appropriate headings in this report. All meats and meat food products received at Manila from any source are given a careful veterinary inspection. Local abattoirs were in such unsanitary condition that local purchases were stopped. The need of adequate veterinary hospital facilities at Manila has been met by the construction of a hospital. This is designated as the Department Veterinary Hospital, and is under the jurisdiction of the department surgeon. It has a capacity of 40 patients.

Panama Canal Department.—Four veterinary officers were on duty including one as department veterinarian. In addition to the service with animals there was maintained veterinary ante and post mortem inspection of cattle and hogs slaughtered at Mount Hope abattoirs for the use of the troops in the department. There were no outbreaks of communicable disease.

American Forces in Germany.—The chief veterinarian and three assistants conducted this service on June 30, 1920. This personnel was inadequate, because the stations and commands having animals were so widely scattered. Service was rendered at 17 places besides the general headquarters. The veterinary service is also confronted with extensive meat and forage inspection requirements which it has been impossible to handle properly with the force available. Animal conditions have steadily improved as a result of settled garrison duties and more attention being paid to their hygiene. The cases of communicable diseases have been negligible.

MEAT AND DAIRY HYGIENE.

Veterinary officers and, when required, enlisted men, have been on duty at all the reserve, intermediate, and general area depots at which meats and meat food products were purchased or held in storage in considerable quantities which require reinspection for their sanitary condition before being sold to the public. The assignment of a veterinary officer to a supply depot does not mean that all the meats purchased through the agency of that depot have received the Army veterinary inspection. Contracts are made at packing houses which are distant from the depots with the proviso that acceptance by the Government is based on inspection at point of delivery. When a veterinary officer is available at the point of delivery, he performs this duty, otherwise the supplies fail to receive the veterinary inspection. This difficulty may be met by sending the depot veterinarian to the purchasing point, but considerable travel would be entailed. Wherever practicable it would seem desirable that veterinary inspections at the point of purchase should be the rule. Veterinary officers have been on duty during the entire year inspecting meats at purchase at Tsingtau in China for the Philippine Department and at Mount Hope in Panama for the Panama Canal Department. The veterinary inspection of meat food supplies and of dairies has been maintained at all stations at which officers or qualified enlisted men have been available.

The extent of the veterinary inspections pertaining to the meat and dairy hygiene service is tabulated below.

TABLE 53.—*Meats and meat food products receiving veterinary inspection, January to December, 1920.*

Articles.	Procurement points (pounds).		Camps or posts (pounds).	
	Continental United States.	All others.	Continental United States.	All others.
Beef, fresh	38,665,401	8,383,222	29,794,550	8,109,765
Beef, frozen	66,263,240	3,218,256	10,826,230	21,120,741
Mutton, fresh	410,009	1,750	499,461	56,092
Mutton, frozen	1,639,499	1,356	163,596	238,833
Pork, fresh	1,394,023	167,932	2,312,879	328,862
Pork, frozen	1,598,914	3,567	505,044	372,810
Turkey, fresh	605,032	4,943	542,668	10,268
Turkey, frozen	144,155	64	116,210	166,668
Veal, fresh	317,024	53	3,001,072	722,120
Veal, frozen	363,291	2,908	321,229	54,332
Edible organs, fresh	128,590	57,574	1,122,463	106,388
Edible organs, frozen	264,683	847	380,564	174,651
Sausage, fresh pork	694,878	11,145	1,446,568	28,364
Miscellaneous pork products	309,871	23,440	2,182,217	42,248
Bacon, Army	3,385,006	.....	1,154,850	186,830
Bacon, breakfast	1,329,835	.....	1,304,953	94,986
Beef, salt	460,608	10	46,858	12
Ham, dry-cured	21,755	.....	178,320	39,325
Ham, sugar-cured	2,573,700	3,032	2,876,926	482,881
Pork, salt	65,671	23	113,254	5,129
Sausage, smoked	481,576	53,512	1,698,269	57,324
Shoulders, smoked	129,058	317	110,214	9,821
Bacon, Army, canned	6,944,075	.....	650,001	908,987
Bacon, breakfast, canned	2,144,712	.....	64,335	42,293
Beef, corned, canned	23,700,020	2,212	1,164,455	731,498
Beef, fresh, roast, canned	21,324,677	.....	183,664	158,235
Beef, sliced, canned	200,826	.....	71,673	69,320
Beef, tongue, canned	107,765	.....	13,658	11,162
Ham, canned	18,061	.....	10,670	459
Hash, corned-beef, canned	10,355,884	.....	904,699	137,020
Sausage, pork, canned	1,273,735	.....	45,421	91,746
Sausage, Vienna, canned	1,484,032	.....	164,026	140,785
Turkey, boneless, canned	108	.....	22,866	25
Lard, issue	4,410,573	.....	2,106,190	729,015
Lard, substitute	4,957,792	.....	3,471,623	656,599
Oleomargarine	5,240,664	30,734	347,316	134,588
Butter	5,155,506	3,387	3,690,141	1,222,050
Cheese	3,406,953	993	532,803	189,862
Eggs	412,165	22,728	900,080	341,103
Fish, canned	431,748	.....	179,931	427,687
Fish, fresh	727,106	18,011	731,666	281,865
Milk	1,230,472	.....	1,465,356	5,356,327
Miscellaneous meat products	844,621	23,440	465,340	46,804
Poultry	2,076,943	6,130	788,023	196,787
Total	217,694,307	12,041,596	78,672,332	44,282,667
Total	229,735,903		122,954,999	

TABLE 54.—*Meats and meat food products rejected at veterinary inspections, January to December, 1920.*

Articles.	Procurement points (pounds).		Camps or posts (pounds).	
	Continental United States.	All others.	Continental United States.	All others.
Fresh meat products	691,896	830,625	193,355	1,031,989
Cured meats	84,434	2,414	60,301	4,893
Canned meat products	926,450	.....	48,989	4,698
Miscellaneous meat products	207,682	5,360	65,209	22,080
Total	1,910,462	838,399	367,854	1,063,660
Total	2,748,861		1,431,514	
CAUSES OF REJECTION.				
Bruised	18,916	3,090	2,745	1,423
Contaminated and decomposed	133,847	.....	33,347	118,417
Defrosted	5,100	.....	850	20
Leakers and swellers	913,529	.....	55,483	13,130
Maggots, fiber bugs, and skippers	539	.....	9,185	.....
Moldy, sour, and slimy	47,281	.....	82,124	13,019
Rat eaten	4,708	.....	28	.....
Stale	108,341	.....	15,796	1,532
Non compliance with specifications	664,241	835,309	159,106	915,895
No cause given	13,960	.....	9,190	224
Total	1,910,462	838,399	367,854	1,063,660
Total	2,748,861		1,431,514	

In addition to the foregoing there were inspected and accepted or rejected at foreign procurement points the following numbers of carcasses:

	Inspected.	Rejected.
Cattle	13,704	1,614
Hogs	1,027	189
Sheep	35	.....
Total	14,766	1,803

One thousand nine hundred and thirteen dairies were given one or more inspections, resulting in the condemnation of 80 of them, for the following causes:

Unsanitary	59
Unsuitable equipment	19
Unsanitary or diseased cattle	2
Total	80

SANITATION.

The only routine reports bearing on animal sanitation which reach this office are weekly reports on communicable diseases rendered when the diseases actually exist. As an index of the sanitary conditions of the animals particularly with reference to the existence of causes of preventable inefficiency and disease and the progress made in controlling the same, such reports are of slight value. Prevention is the keynote of correct animal hygiene. It is too late to protect the health after the causes of disease have been permitted to produce their harmful results. Likewise information received after the

disease has developed is received too late to be of great practical use. Recommendation will shortly be submitted to the War Department requiring that veterinary sanitary reports from stations be forwarded.

COMMUNICABLE DISEASES.

Glanders in the United States.—During the year 1920, 231,284 animals were given the intradermic mallein test, 147,043 being horses and 84,241 mules, as a result of which 8 horses and 2 mules were destroyed; 429 animals were retested and serologically tested, 308 being horses and 121 mules, resulting in 14 additional horses being destroyed, or a total for the year of 24—22 horses and 2 mules. The proportion of animals destroyed to the total animal strength (based on an average of 72,006) was an average of 0.33 per 1,000, or about 1 to every 3,000 animals. Considering the horse and mule group separately, it is found that, based upon a total strength of each group, the average number of animals destroyed was 0.526 per 1,000 in the horse group, and the average number destroyed in the mule group was 0.066 per 1,000. During the calendar year 1919 the average strength of the Army animals was 116,000, and 1,138 were destroyed for glanders. During 1920 the average strength was 72,006 and but 24 were destroyed. It is evident then that the protective measures adopted in the control of glanders and the methods of conducting mallein tests, as indicated in last year's report, have been successful. Two of the 24 cases showed clinical symptoms, but no autopsy was performed. Of the remaining cases, 10 were positive on postmortem, 4 were negative, and there is no postmortem record of 8. Only one of the tissue specimens submitted to the laboratories was reported as positive to glanders.

It is difficult to determine the original source of infection in all cases. The case at Camp Pike was an animal shipped from Old Hickory Arsenal, Tenn., which reacted to the intradermic test upon arrival. It was not determined when the animal was previously tested, but it had been at Old Hickory Arsenal two years.

Two cases found at Cornell University, Ithaca, N. Y., belonged to the Artillery Reserve Officers Training Corps unit. There was no record of previous test.

The case at Camp Lee, Va., was among a shipment of animals received from Morgan General Ordnance Depot, South Amboy, N. J. When the animals at that depot were tested three reactors were found. There was no record of when they were previously tested.

The cases discovered at Camp Travis, Tex., were among a shipment of "I. C." animals gathered from various border stations and sent to Travis for sale. One mule was a clinical case.

The five cases at Camp John H. Beacom, Calif., occurred in a squadron of the Eleventh Cavalry, which had been on border duty for some time and without veterinary service. The cases were discovered when a veterinary officer from Camp Kearny was sent to test them.

The cases at Front Royal, Va., and Fort Sill, Okla., were evidently sporadic. Tissue specimens from the one case at Front Royal were positive to glanders; one of the two cases so reported by our laboratories since engaged in glanders work.

The case at Marfa, Tex., is recorded as a clinical case. The animal presented a history of obstruction of the lacrymal duct due to injury received in 1918. It was treated by irrigation through nostril for

the nasal discharge in September, 1919. Intradermic mallein tests in November and December, 1919, were negative. In January, 1920, specimen of nasal discharge sent to laboratory was proven to be positive to glanders by the inoculation of laboratory animals.

The occurrence of seven cases at Fort Keogh was the only true outbreak during the year. The source of the infection was not definitely determined. An animal that had been in the veterinary hospital for some time undergoing treatment for "strangles abscesses" of long standing finally gave a positive reaction to the intradermic test. The depot was immediately placed in quarantine, contacts tested, and before the situation was cleared up in March, 1921, 4,259 animals had been tested and 16 destroyed, 7 in 1920 and 9 in 1921.

During the year 1920, 231,713 intradermic tests and retests were performed. As the average strength of Army animals was 72,006, it is evident that the animals receiving regular veterinary attention were tested about three times during the year. Just half of the glanders cases occurring, not counting the two among "I. C." animals assembled at Camp Travis, were from stations not having regular veterinary service, and in one instance fully two years had elapsed since the last mallein test. This has brought up the question of the test of animals at stations not having regular veterinary service, and also the advisability of not allowing more than six months to elapse between tests. Recommendation has been made to the Adjutant General that the policy be adopted and published in War Department orders in effect that as a routine procedure all public animals shall be given the intradermic mallein test for glanders at least once in six months. With the adoption of the above recommendation in connection with the present regulations governing mallein testing, it is felt the incidence of glanders among Army animals can be reduced to a practically negligible number. There were no material changes in the technique of handling glanders described in the report for last year. No cases of glanders were reported during the calendar year 1920 from the Panama Canal Zone, Hawaiian Department, or the American Forces in Germany.

The following table is a summary of the monthly reports of animals tested, retested, and destroyed:

TABLE 55.—*Monthly report of animals tested and retested for glanders, and of those destroyed (United States only).*

Date.	Original tests.		Destroyed.		Serological and retests.		Destroyed.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
1920.								
Jan. 31	12,055	8,346			6			
Feb. 29	12,008	6,520			2			
Mar. 31	12,418	5,602						
Apr. 30	12,488	5,424	1		1			
May 31	11,107	5,453	1		48	87		
June 30	23,136	11,302	1		62	15		
July 31	10,983	5,781			5	2	3	
Aug. 31	13,314	6,925			62	1		
Sept. 30	7,480	7,506	5	2				
Oct. 31	11,654	8,468						
Nov. 30	10,296	5,131			2		3	
Dec. 31	10,104	7,783			70	8	8	
Total	147,043	84,241	8	2	258	113	14	
Total	231,284		[1] 10		371		[1] 14	

[1] Total deaths, 24.

The tabulation below shows the stations at which one or more animals were destroyed for glanders:

	Cases.
Fort Keogh	7
Camp John H. Beacom, Calif.	5
Morgan General Ordnance Depot	3
Artillery Reserve Officers Training Corps unit, Cornell University	2
Camp Travis (remount depot)	2
Camp Lee, Va.	1
Front Royal, Va.	1
Camp Pike (remount depot)	1
Marfa, Tex.	1
Fort Sill, Okla.	1
Total	24

Glanders in the Philippines.—The establishment of a veterinary service properly supervised by an experienced veterinary officer assigned to department headquarters has made it possible for the first time to apply the intradermic test thoroughly and systematically to all the public animals in the Philippine Department. As might be expected, a relatively large number of positive cases was discovered. Their elimination and the maintenance of regular tests in future should practically free the department from glanders. During the year, 6,801 horses and 5,767 mules in the Philippine Department received the intradermic test, 21 horses and 15 mules giving positive reactions, and 280 horses and 219 mules giving doubtful reactions. Retests and serological tests showed that 6 horses and 3 mules were positive, making a total of 27 horses and 18 mules destroyed for glanders, divided among the stations as follows:

Station.	Horses.	Mules.
Camp Stotsenburg	9	5
Manila	9	4
Fort Wm. McKinley	1	8
Fort Mills	8	1
Total	27	18
Total	45	

Dermatitis gangrenosa.—This disease has again been reported from nearly all sections of the country, and was more prevalent at the southern stations as in 1919. The total number of cases reported in the Army was 1,084, of which 772 were in horses and 312 in mules. The fact that some of these cases were first carried on sick report as "picked up nail," "dermatitis," "pododermatitis," and allied foot infections and the diagnosis later changed as the result of the demonstration of B. necrophorus indicates that resort to bacterial examinations in more of such cases would have greatly increased the cases of dermatitis gangrenosa. More accurate statistics in future will unquestionably show this condition as a secondary infection in a large percentage of cases of foot injury.

During the year the disease was reported from the following stations:

Camp Gordon (Camp Jackson after October, 1920)	901	Fort Sill	4
Camp Lewis	94	Front Royal	1
Camp Dodge	33	Fort Bliss	1
Camp Travis	26	Fort Brown	1
Camp Pike	23	Total	1,084

Of the 1,084 admissions, 6 horses and 2 mules died or were destroyed, and 13 horses and 32 mules were "otherwise disposed of."

It will be noted that by far the greatest number of the cases occurred at Camp Gordon. The corrals of this remount depot had been badly infected since 1917, and in rainy weather some of them were knee deep in mud and filth and impossible to drain. To a lesser extent the same conditions prevailed at Camps Lewis, Dodge, Travis, and Pike. In October, 1920, Camp Gordon was abandoned, the animals going to Camp Jackson, S. C. Prior to leaving Camp Gordon, however, a vigorous campaign of cleaning up was inaugurated and great improvement was shown. There were no further admissions after reaching Jackson, and the number on sick report was gradually lessened, so that at the end of the year but 40 cases were being carried, and the last case was discharged June 10, 1921.

The most successful treatment of this condition has been that described in last year's report, i. e., the application of acetic acid packs (in the form of 50 per cent commercial vinegar) following thorough cleaning of parts.

Influenza.—The number of cases of influenza reported in the Army, including foreign stations, was 2,449, of which 2,445 were horses and 4 mules, resulting in the death of 190 horses. The disease was distributed as follows:

Place.	Admitted.		Died.	
	Horses.	Mules.	Horses.	Mules.
United States proper	2,430	2	188	.....
Philippine Department	2	.....	2	.....
American Forces in Germany	13	2	.....	.....
Total	2,445	4	190	.....

The rate of admission for influenza for 1920 in the United States proper, irrespective of the proportion of horses and mules, was 33.77 per 1,000. The admission rate for horses was 58.21 per 1,000 and for mules 0.066 per 1,000.

In comparison with the year 1919, there was a marked increase in the rates for influenza in 1920. During the year 1919 the rate of admission for the United States proper, irrespective of the proportion of horses and mules, was 8.02 per 1,000, while the rate for 1920 was 33.77 per 1,000, or more than four times as great. Analysis of the figures shows that two extensive epizootics occurred in 1920, one at Camp Funston and the other at Camp Taylor. At the former place there were 600 admissions and at the latter 627, making a total at these two camps alone of slightly over 50 per cent of all the admissions for influenza. Disregarding these two camps, the admission rate was 16.7 per 1,000, still about twice that for 1919. Reports received from Camps Funston and Taylor are so meager as to give little information regarding the important factors in these epizootics and it is difficult to ascribe a definite reason for the greatly increased admission rate for 1920 over that for 1919. During the latter year the general veterinary inspectors insisted upon every animal receiving any treatment whatever being placed upon sick report, and it is

possible the results of their work began to show in 1920 and mild cases of catarrhal influenza that formerly were not placed on sick report were taken up in 1920. This, however, would hardly account for such an increase. While the incidence of the disease can hardly be termed a pandemic, yet the fact remains that it was much more prevalent in 1920 than 1919. It should be remembered that in 1920, 10,496 animals were purchased and shipped, while in 1919 but 7,850 were purchased, and the predisposition of "green" animals to this infection is generally recognized.

The use of a mixed infection "shipping fever" bacterin as a prophylactic against influenza is discussed elsewhere.

Strangles.—The number of cases of strangles reported in the Army, including foreign stations, was 2,327, 2,324 of which were horses and 3 mules, resulting in the death of 93 horses. The disease was distributed as follows:

Place.	Admitted.		Died.	
	Horses.	Mules.	Horses.	Mules.
United States proper	2,305	3	93	.....
Philippine Department	4	.....	.....	.....
United States Army Transport Dix	15	.....	.....	.....
Total	2,324	3	93	.....

The rate of admission for strangles for 1920 in the United State proper, irrespective of the proportion of horses and mules, was 32.05 per 1,000. The admission rate for horses was 55.22 per 1,000, and for mules 0.0099 per 1,000. During the calendar year 1919 the rate of admission for strangles in the United States proper, irrespective of the proportion of horses and mules, was 4.84 per 1,000, while the rate for 1920 was 32.05 per 1,000, showing an extraordinary increase in the incidence of this disease.

Remarks relating to incidence of influenza in 1920 may well be applied to strangles. Strangles occurred at remount depots principally, 982 cases, or 42.6 per cent of the total occurring at Forts Keogh, Robinson, Reno, and Front Royal. The balance of the cases were about evenly divided between the camp remount depots. It is believed that newly purchased horses had a greater influence upon the incidence of strangles than any other factor, as the disease increased as such animals arrived at the remount depots. Facilities were such that newly purchased animals could not always be segregated, the result being the rapid spread of the disease and consequent infection of the colts. This was especially true at Front Royal and Fort Reno, where 369 and 420 cases, respectively, occurred.

Infectious abortion.—Brood mares at remount depots due to foal in the spring of 1920, began to abort in the fall of 1919. The continuance of these abortions pointed to their infectious nature, and specimens sent to the laboratory were reported as positive for the specific organism of infectious abortion. Blood samples and uterine exudates from all brood mares were sent to the laboratories and positive reactions were reported as follows: Front Royal, 1 positive (1 suspicious); Fort Keogh, 32; Fort Reno, 31. Abortions contin-

ued until in March when the administration of bacterins was started. After the bacterins were administered abortions ceased. Cases pronounced positive by laboratory findings in animals actually aborting occurred as follows: Fort Keogh, 37; Fort Reno, 31; and Front Royal, 4 positive and 1 suspicious. In addition abortions not considered infectious in character occurred as follows: Fort Keogh, 12; Fort Reno, 6; Front Royal, 6, and Fort Robinson, 2. All mares were given the bacterin treatment, whether in foal or not, and following the treatment serologically tested; approximately 80 per cent gave positive reactions.

The following table shows the results of laboratory work upon the mares bred in 1919 to foal in the spring of 1920:

Station.	Number of mares positive to complement fixation prior to bacterin treatment.	Number of mares given bacterin treatment.	Number of mares positive to complement fixation after bacterin treatment.	Number of infectious abortions.	Abortions not considered infectious.
Fort Keogh	32	308	[1] 96	37	12
Fort Reno	31	309	254	31	6
Front Royal	2	56	19	5	6
Fort Robinson		125	75	0	2
Total	65	798	444	73	26

[1] Total of animals tested at Fort Keogh.

One case at Front Royal reported as positive prior to complement fixation test and included in the number of infectious abortions was suspicious. The 96 cases at Fort Keogh shown as positive to complement fixation test following bacterin treatment were the only ones so tested. In addition to the 75 at Fort Robinson reported as positive to the complement fixation test following bacterin treatment, 22 were reported as questionable. Following the 254 positive reactions to the complement fixation test from the 309 mares at Fort Reno after bacterin treatment, about 1,600 additional blood specimens were so tested from June 1 to September 30, and all were found negative.

During the calendar year 1920, nine cases of abortion occurred in the dairy herd at Fort Leavenworth Disciplinary Barracks. The B. abortus (Bang) was demonstrated in each case by bacteriologic examinations. Two of the nine cases died.

Tetanus.—Fifty-four cases of tetanus occurred among Army animals, of which 33 died and 21 recovered. These cases were practically all handled the same way. When admitted to the hospital an effort was made to find the seat of infection, and when found, to thoroughly disinfect it. Seventy-five per cent of the cases followed nail wounds of the feet. Massive doses of tetanus antitoxin were administered as treatment. Reports do not show number of animals given antitoxin as a prophylactic measure.

Epizootic lymphangitis.—Sporadic cases of this disease occurred during the year in the Philippine Department, 23 cases being reported from Camp Stotsenburg, 5 from Manila, and 5 from Fort William McKinley. When discovered cases were isolated, and the majority

readily responded to surgical treatment followed with bichloride of mercury dressings.

Ulcerative lymphangitis.—One case of ulcerative lymphangitis occurred among animals brought from Europe and held in quarantine at Newport News, Va. The disease was reported in last year's report as occurring in 1919, but the animal was destroyed in February, 1920.

Mange.—The Army has been practically free from mange during the year 1920. One case, a recurrent one at Newport News in an animal returned from France, was considered incurable and destroyed in April. In the American forces in Germany there were eight cases presenting suspicious clinical signs which finally recovered after receiving the dip treatment for mange. Repeated laboratory examinations were negative except in one case of the psoroptic variety.

Dhobie itch (dermatitis).—Sporadic cases of this condition occurred in the Philippine Department, 22 cases being reported from Camp Stotsenburg and 2 from Camp Eldridge. The cases were promptly isolated, clipped, and thoroughly cleaned. This was followed by applications of chrysarobin ointment and all responded to such treatment.

Rabies.—No cases of rabies in equines were positively diagnosed. Two horses at Fort Des Moines, Iowa, developed clinical signs. One was destroyed to terminate suffering and the other died within 48 hours. Laboratory examination of the brains of both animals was negative, as was also that of the dog which was supposed to have bitten them.

Anthrax.—During the latter part of August the death of 7 horses was reported at Fort Ringgold, Tex. (actually at Roma, Tex.), from anthrax. The veterinary officer on duty at the Southern Department made a laboratory investigation of the outbreak and confirmed the diagnosis. Strict quarantine was established and the healthy animals were immunized by the simultaneous vaccination method. No further deaths occurred, and two animals showing symptoms recovered. The quarantine was raised October 4, the animals being considered as free from anthrax.

Trypanosomiasis.—An outbreak of surra occurred at Fort Wm. McKinley, Philippine Department, 26 animals being destroyed. The diagnosis was confirmed by the demonstration of the trypanosome in each case. One case of trypanosomiasis occurred among animals brought from Europe and held in quarantine at Newport News, Va, The disease was reported in last year's report as occurring in 1919. but the animal was destroyed in February, 1920.

Forage poisoning.—During the calendar year 1920 reports show the admission of 24 horses and 1 mule for forage poisoning, with the death of 11 horses. Corroborative laboratory findings have not been reported for any of these cases.

ANIMAL MORBIDITY AND MORTALITY.

In Table 59 at the end of this report is shown the absolute number of admissions and losses, the disabilities being arranged alphabetically, for the entire Army for the calendar year 1920.

Animal strength.—The animal strength was obtained from Form 102, rendered monthly from practically all stations to which public animals were assigned. Although these returns contained the great majority of the animals, there were nevertheless numerous animals in other organizations not included in the reports. Based upon the reports received, the average animal strength of the United States Army was 83,394 horses and mules, of which 48,035 were horses and 35,359 were mules, the horse strength being 57.60 per cent and the mule strength 42.40 per cent, an approximate ratio of 7 horses for every 5 mules.

Admissions.—An animal is admitted to sick report when considered unserviceable for duty because of disease or injury. The admission rate is determined on the per thousand basis. The animal admission rate for the entire Army for all causes was 577.91 per thousand, which is considerably lower than that for the year 1919 when it was 654.22 per thousand. The admission rate for horses was 720.06 for every 1,000 and for mules 384.80 for every 1,000, showing 76.76 per 1,000 less horses and 65.25 less mules admitted to sick report than in the year 1919.

Otherwise disposed of.—Under this designation are included those animals which have been inspected and condemned as unfit for further use in the service. Such animals were usually put on sick report, and, although susceptible in many cases to restoration to health, there were defects or economic reasons which made their sale desirable. This total also includes numerous cases dropped from sick report under this heading and taken up simultaneously with another diagnosis. This is a defect inherent to the form now in use. Since the animals first mentioned were lost to the service, they should be considered with the death rate in estimating the total loss to the Army. During the period January–December, 1920, there were 594 thus disposed of, 382 of which were horses and 212 were mules.

Returned to duty.—The animals returned to duty represent those on sick report which have sufficiently recovered from the disease or injury to be considered serviceable. The number of recovered or cured animals was obtained by deducting from those admitted to sick report the number of deaths and animals otherwise disposed of. On this basis for the January–December, 1920, period it was found that out of every 1,000 admissions 926.61 animals were returned to duty. In the horse group there were 927.98 recoveries for every 1,000 of the admissions and in the mule group 923.12 for every 1,000, showing but slight difference in this respect in the two groups of animals.

Death rate.—The death rate includes animals which died or were destroyed for various pathological reasons. The total number of deaths reported was 2,943, giving an annual death rate of 35.29 per 1,000, as compared to a rate of 41.32 for the year 1919. There was an annual death rate of 43.90 for every 1,000 horses and an annual death rate of 23.59 for every 1,000 mules. It is worthy of note that there is an average of 84.91 per cent higher rate among the horses for admissions and deaths than among the mules.

The following tabulation will show for purposes of comparison the most common causes of death in absolute numbers and annual rates per 1,000 in the horse and mule groups considered separately:

TABLE 56.—*Most common cause of death or destruction of Army animals, January to December, 1920.*

Cause.	Absolute numbers.			Annual rate per 1,000.		
	Horses.	Mules.	Total.	Horses.	Mules.	Total.
Unknown [1]	486	308	794	10.12	8.71	9.52
Miscellaneous [2]	228	95	323	4.75	2.69	3.87
Fractures	221	64	285	4.60	1.81	3.42
Influenza	190	.....	190	3.96	.....	2.28
Exhaustion	46	50	96	.96	1.41	1.15
Strangles	93	.....	93	1.94	.....	1.12
Colic	55	36	91	1.14	1.02	1.09
Pneumonia	73	11	84	1.52	.31	1.01
Glanders	49	20	69	1.02	.57	.83
Amaurosis	58	4	62	1.21	.11	.74
Enteritis	33	23	56	.69	.65	.67
Burns, fire	44	11	55	.92	.31	.66
Laminitis	44	3	47	.92	.08	.56
Impaction	29	16	45	.60	.45	.54
Wounds, lacerated	28	12	40	.58	.34	.48
Wounds, penetrating	28	11	39	.58	.31	.47
Wounds, contused	28	10	38	.58	.28	.46
Picked up nail	22	12	34	.46	.34	.41
Ringbone	29	5	34	.60	.14	.41
Tetanus	18	15	33	.37	.42	.40
Heat, stroke	19	12	31	.39	.34	.37
Septicemia	20	8	28	.42	.23	.34
Hemoglobinuria	25	2	27	.52	.06	.32
Surra	2	24	26	.04	.68	.31
Arthritis	19	6	25	.39	.17	.30
Hemorrhage	18	6	24	.37	.17	.29
Purpura hemorrhagica	22	1	23	.46	.03	.28
Drowned	11	9	20	.23	.25	.24
Canker	12	7	19	.25	.20	.23
Paraplegia	11	8	19	.23	.23	.23
Rupture, stomach	12	7	19	.25	.20	.23
Quittor	13	5	18	.27	.14	.22
Ophthalmia	14	3	17	.29	.08	.20
Spavin, bone	10	7	17	.21	.20	.20
Pneumonia, lobar	16	.....	16	.33	.....	.19
Indigestion	14	1	15	.29	.03	.18
Fistula, withers	11	4	15	.23	.11	.18
Tendinitis	9	3	12	.19	.08	.14
Wounds, punctured	8	4	12	.17	.11	.14
Forage poisoning	11	.....	11	.23	.....	.13
Ossification of lateral cartilage	7	4	11	.15	.11	.13
Abscess	7	3	10	.15	.08	.12
Lightning stroke	9	1	10	.19	.03	.12
Pododermatitis	7	3	10	.15	.08	.12
Total	2,109	834	2,943	.....	.....	.....

[1] This group contains animals not on sick report condemned and destroyed, found dead, killed by or destroyed as a result of extensive accidents, and animals under observation which died or were destroyed undiagnosed.

[2] This group contains the animals that died from various causes, the number of deaths for any one cause being less than 10.

INCIDENCE OF SPECIAL DISEASES AND INJURIES.

Disabilities of greatest frequency.—It is instructive to note the most common causes of admissions taking the horse and the mule group separately. Accordingly, the six most common diseases and the six most common traumatisms are thus shown as to admissions and deaths in absolute numbers and annual rates per 1,000 horses or mules, as the case may be, in the following tabulations:

TABLE 57.—*Admissions and losses from the six most common diseases, horses and mules, considered separately, 1920, absolute numbers and ratios per 1,000.*

HORSES.

Disease.	Absolute numbers.		Annual rate per 1,000.	
	Admissions.	Died or destroyed.	Admissions.	Died or destroyed.
Influenza	2,445	190	50.90	3.96
Strangles	2,324	93	48.38	1.94
Thrush	1,378	2	28.68	.04
Pododermatitis	955	7	19.88	.15
Colic	934	55	19.44	1.14
Dermatitis gangrenosa	772	5	15.03	.12

MULES.

Thrush	811	2	22.94	0.06
Pododermatitis	371	5	10.49	.08
Dermatitis gangrenosa	312	2	8.82	.06
Abscess	200	3	5.66	.08
Conjunctivitis, all varieties	160	.....	4.52	.....
Colic	153	50	4.33	1.02

TABLE 58.—*Admissions and losses from the six most common injuries, horses and mules, considered separately, 1920, absolute numbers and ratios per 1,000.*

HORSES.

Injury.	Absolute numbers.		Annual rate per 1,000.	
	Admissions.	Died or destroyed.	Admissions.	Died or destroyed.
Wounds, all varieties[1]	12,895	124	268.45	2.58
Tendinitis	651	9	13.55	.19
Sprain	583	.....	12.14	.....
Fracture	223	221	4.64	4.60
Hematoma	149	.....	3.10	.....
Dislocation	139	3	2.89	.06

MULES.

Wounds, all varieties[1]	8,097	56	238.90	1.58
Sprain	279	.....	7.89	.....
Tendinitis	222	3	6.28	.08
Fracture	78	64	2.21	1.81
Burns	52	11	1.47	.31
Hematoma	45	.....	1.27	.....

[1] This total includes all cases diagnosed as wounds or picked up nail and abrasions or other wounds (galls) from equipment, or from ropes, chains, etc. (rope burns).

TABLE 59.—*Animals, United States Army, admissions, deaths, and "otherwise disposed of," 1920; absolute numbers.*

[Average strength: Horses, 48,035; mules, 35,359.]

Disability.	Admissions.		Deaths.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Abortion	26					
Abortion, infectious	73					
Abortion, traumatic	18					
Abscess	433	200	7	3	3	1
Acne	27	5				
Amaurosis	58	8	58	4	6	1
Amblyopia	4					
Anemia	10	1	1			
Ankylosis	3	1			3	1
Anuresis	1	1		1		
Anthrax	9		7			
Apoplexy	4	1	3	1		
Arthritis	129	43	19	6	6	7
Acariasis	37	1				
Atrophy, muscular	16	13		2		2
Bite, venomous	2	1	1	1		
Bronchitis	7	2				
Burns, chemical	44	4				
Burns, fire	55	46	44	11		
Burns, rope	1,209	385	1	1	1	
Burns, unclassified	1	2		1		
Bursatte	1					
Bursitis	161	41				
Canker	103	94	12	7		
Cardiac disorders undiagnosed	4	3	4	3		
Cardiac hypertrophy	3		3			
Cardiac palpitation	2	4	2			
Catarrh, intestinal	3	1				
Catarrh, nasal	8	2	1	1		
Cellulitis	5	1				
Chorea	3	4	2			
Colic	935	154	56	37		
Concussion of brain	2		2			
Congestion, cerebral	1		1			
Congestion, lungs	14		8			
Conjunctivitis	396	121				
Conjunctivitis, catarrhal	13	14				
Conjunctivitis, chemical	2					
Conjunctivitis, purulent	3					
Conjunctivitis, traumatic	204	25				
Constipation	12	2				
Contracture of foot	12	9				
Contracture of muscle	2	1	1	1		
Contracture of flexor tendons	4	5			1	4
Coryza	569	59	6		1	
Cryptorchidism	8	2			1	
Curb	13	6				
Cyst, dermoid	9	7				1
Debility, general	12		4		2	
Dental disease	102	14	1			
Dermatitis eczematosa	296	145		1		
Dermatitis gangrenosa	772	312	6	2	13	32
Dermatitis verrucosa	249	136		5		
Dhobie itch	12	12				
Diarrhea	8					
Dilatation of stomach	2	1	1	1		
Dislocation	139	28	3	4	1	
Displacement of solo	2		2			
Drowned	11	9	11	9		
Dystocia, maternal	2					
Eczema	17	11				
Edema	7	2		1		
Elephantiasis	2		1			
Embolism	1		1			
Emphysema, alveolar	8	2	1	2		
Emphysema, pulmonary	18	4	3	2		
Empyema, sinus	16	5	4		2	
Endocarditis	1		1			1
Enteritis	51	23	33	23	10	1
Epistaxis	1	2		1		
Esophagus, spasm of		1		1		
Exhaustion	118	89	46	50	30	24
Fibroma	401	40		2		
Fistula, unclassified	13	6	1	1		

TABLE 59.—*Animals, United States Army, admissions, deaths, and "otherwise disposed of," 1920; absolute numbers*—Continued.

Disability.	Admissions.		Deaths.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Fistula, poll	19	[illegible]	2			
Fistula, withers	104	36	11	4		
Forage poisoning	25	1	12			
Fracture	223	78	221	64		
Galls, harness	682	758				
Galls, saddle	927	367				
Gangrene	10	21	1			
Gastritis	14	5	6	2		
Gastro-enteritis	5	2	5	2		
Gingivitis	12					
Glanders	49	20	49	20		
Glanders suspect	565	335				
Glossitis	1	1		1		
Heat stroke	22	22	19	12		
Hematoma	149	45				
Hematuria	1	4				
Hemoglobinuria	78	5	25	2	1	
Hemorrhage	19	8	18	6	1	
Herpes tonsurans	13	1				
Hydrocephalus	3		1			
Hydrothorax	1		1			
Hygroma:						
Elbow	49	15				
Hock	16	13				
Impaction, intestinal	91	30	29	16		
Indigestion	16	11	14	1		
Influenza	2,445	4	190		18	
Intestinal fermentation	46	12	8	1		1
Intestinal torsion	1		1			
Jaundice	1		1			
Keratitis	73	11	1			1
Lameness, undiagnosed	26	16				2
Laminitis	531	80	44	3	9	[illegible]
Laryngitis	73	5	2		4	
Leptomeningitis	2		1			
Lightning stroke	9	1	[illegible]	1		
Lucilia macellaria, infestation	51	10				
Lymphadenitis	28	14				
Lymphangitis	74	27	6	3		
Lymphangitis, epizootic	10	23	1			
Lymphangitis, ulcerative	1		1			
Malnutrition	71	6	4		2	1
Mange	2		1			
Meningitis	1	2	1	2		
Meningo-encephalitis	7	1	5			
Myelitis	2	2	1			
Myocarditis		1		1		
Myositis	7	3				
Necrosis	12	3				
Nephritis	9	5	1	5		1
Neuritis		1		1		
Obstruction, esophagus	5	3	4	2		
Omphalo-phlebitis	1		1			
Ophthalmia	127	31	14	3	4	1
Ophthalmia, periodic	106	28	8	1		
Ossification of lateral cartridge	151	89	7	4	[illegible]	9
Oxyuriasis	5	1				
Panophthalmitis, traumatic	5	2				
Papilloma	13	2	1	1	2	
Paralysis of recurrent nerve	22	2	4		2	
Paraphimosis	4	2				
Paraplegia	31	8	11	8	[illegible]	8
Parotitis	3	1				
Pediculosis	5	3	1	2		
Periostitis	9					
Peritonitis	6	2	5	2		
Pharyngitis	31	2		1		
Phimosis	8	4				
Phlegmon	7	2				
Picked up nail	2,434	1,769	22	12	146	32
Piroplasmosis	1					
Pleurisy	7		2			
Pneumonia, unclassified	239	16	73	11		
Pneumonia, lobar	27	1	16			
Pneumonia, lobular	2	1	2	1		
Pododermatitis	955	371	7	[illegible]	4	6
Pododermatitis circumscripta	384	60			2	3

TABLE 59.—*Animals, United States Army, admissions, deaths, and "otherwise disposed of," 1920; absolute numbers*—Continued.

Disability.	Admissions.		Deaths.		Otherwise disposed of.	
	Horses.	Mules.	Horses.	Mules.	Horses.	Mules.
Podotrochleitis	45	11	4		3	2
Poisoning	2		2			
Poisoning, strychnine	2		2			
Polypus	2	1	1			
Pruritis	1	13				
Purpura hemorrhagica	54	4	22	1		
Quittor, cartilaginous	110	36	13	5		
Retention of urine	1	2		1		
Rheumatism, muscular	13	10	3	1		4
Rhinitis	155	17	8	1		
Ringbone	125	54	29	5	31	33
Rupture, artery	7	3	4	3		
Rupture, bladder	1	1		1		
Rupture, cornea	7					
Rupture, diaphragm	1		1			
Rupture, intestinal		1		1		
Rupture, rectum	2	2				
Rupture, spleen	2		2			
Ruptute, stomach	21	8	12	7	2	
Rupture, tendon	4	3	1	1		
Rupture, vein	1		1			
Sapremia	1		1			
Scirrhous cord	6	1				
Septicemia	20	11	20	8		
Sesamoiditis	9					
Shock, electrical	2	1	1	1		
Sinusitis	1				1	
Spavin, bog	26	13	2		1	
Spavin, bone	94	56	10	7	10	6
Splint	75	18	4			
Sprain	583	279			1	4
Stenosis	1		1			
Stomatitis	11	4				
Strain, ligament	37	25		1		
Strain, muscle	21	13	1	1		
Strain, tendon	20	10				
Strangles	2,324	3	93			
Strangulation	6	1	6	1		
Strongyloides	10					
Sunstroke	2	2	2	2		
Surra	2	24	2	24		
Synovitis	14	5	4		2	
Tendinitis	651	222	9	3	10	1
Tenosynovitis	34	15	3	1		
Tetanus	32	22	18	15	1	
Thoroughpin	5	3				1
Thrush	1,378	811	2	2	3	
Thrombosis	1	2	1	2		
Torticollis	2		1	1		
Toxemia	20	12	2		1	
Tumor	18	12	1			2
Trypanosomiasis	1		1			
Ulcer	9	8	1			
Unknown	782	493	486	308	6	5
Urticaria	7					
Valvular insufficiency	1		1			
Verruca	13	9				
Volvulus	5	5	2	3		
Wounds, abraded	228	107				1
Wounds, contused	3,472	1,150	28	10	5	6
Wounds, incised	516	247	4	1		
Wounds, infected	7	8	1			
Wounds, involving joint capsule	5	4	1	4		
Wounds, gunshot	15	3				
Wounds, lacerated	3,163	2,485	28	12	14	
Wounds, multiple	58	32		1		
Wounds, penetrating	1,971	672	28	11	2	2
Wounds, perforating	77	48	3			
Wounds, punctured	145	70	8	4		1
All others	68	23		1		1
Total	34,558	13,446	2,109	834	382	212

STATISTICAL DIVISION.

The Statistical Division was authorized by Office Order No. 5, February 15, 1921. Previous to this time it had functioned as the "Medical Record Section, Sanitation Division."

The purpose of the establishment of the Statistical Division was to broaden the scope of its statistical activities. The functions of the Medical Record Section were, in brief, to handle the medical records of the Army and to prepare permanent vital statistics from them for administrative use in the Army and for publication in the annual reports of this office. A brief account of the activities of this section, during the period of the war, was published in the Annual Report of 1920, pages 196–198.

It is proposed that the function of the new Statistical Division in addition to those that formerly belonged to the Medical Record Section should be: (*a*) the handling of the current vital statistical report, the current reports of hospitalization, and the monthly report of Medical Department personnel and equipment, all reported on Form 86, Sections *a*, *b*, and *c*, authorized February 14, 1921, and first used July 1, 1921; (*b*) to assist the Finance and Supply Division of this Office with the electrical tabulating equipment in maintaining a modern cost accounting system and in keeping a current inventory of the technical medical supplies both for the Medical Department Depots, and for the individual hospitals; and (*c*) to assist any other division of the office with statistical work, and especially with such work as requires the use of the tabulating equipment.

Probably the most important change effecting this division during the fiscal year ending June 30, 1921, was the inauguration of a new method of preparing and rendering the "Sick and Wounded Reports." This method was prescribed in Circular Letter No. 57, April 30, 1920, to take effect July 1, 1920. That section of the "Manual Medical Department," 1916, relating to the medical records and the preparation and rendering of the sick and wounded report has been revised accordingly, and will be published shortly as one of the series of the special regulations, pertaining to the Medical Department.

Apparently the system adopted will be simple enough to meet the requirements of the Army, at all times, not only in peace but also in war and during a war in the theater of operation, as well as in the zone of the interior. The changes in brief were:

(*a*) Two new forms were authorized, the field medical card, Form 52c, and the field medical envelop, Form 52d, the two comprising the field medical record. This field medical record which was first adopted and used by the American Expeditionary Forces, is a modification of the English field medical record. The experience acquired there showed that it fulfilled a long-felt need in that, if properly used, it provided a continuous record of each patient as he was evacuated through the various hospitals from the front to the rear in the theatre of operation and finally to the zone of the interior.

(*b*) The diagnosis tag has been revised, the name changed to "The Emergency Medical Tag," and given a number, 52b. The size of the revised tag is the same as that of one fold of the field medical card, which in turn is the same as that of the regular report card, Form 52, and of the index of register cards, Form 52a. This simplifies the filing of these forms, since all can be filed in the same size file box.

An additional advantage of the new and revised forms is that the entries at the top of all the report forms are uniform. The new forms, including the emergency medical tag (the revised diagnosis tag), are all printed on a good quality linen and are consequently durable and waterproof.

(*c*) The nominal check list which was of some value, though not of sufficient value to warrant its continuance, since it required a considerable amount of time for its preparation, has been discontinued.

(*d*) The numerical report sheet, Form 51, was simplified by the omission of the statistical summary. The important parts of it, that is, the statement of the composition of the commands, the movements of the commands, and the strength of the commands, are retained. A great deal of difficulty was experienced during the late war in obtaining the correct daily average strength from such camps and posts as furnished this report, since the data showing the composition of the command was often either omitted or it was not given in sufficient detail.

Some form of report will be furnished by each organization and hospital every month. The general character of these will be:

(*a*) For troops in the field and while on maneuvers in time of peace and for troops in the theater of operation in time of war, the senior medical officer of each independent command will furnish a report consisting of a report sheet (Form 51) and emergency medical tags for all cases whose treatment is completed without admission to hospital, including such records on the emergency medical tags as is practicable to obtain for those who are killed in action.

(*b*) The hospitals in such areas will furnish reports, consisting of the report sheet and the field medical records, which will include in addition to the field medical envelopes, and the field medical cards, the emergency medical tags for all cases who have received treatment prior to admission to hospital.

(*c*) For hospitals in fixed stations in time of peace and in the zone of the interior in time of war, the report rendered will consist of: (1) report sheet (Form 51); (2) report card (Form 52); and (3) field medical record of all cases received by transfer from organizations on maneuvers or in the theater of operation.

FINANCE AND SUPPLY DIVISION.

The functions of the Medical Department relative to its supplies continued to be advisory until November 15, 1920, when, in conformity with General Orders, No. 66, November 3, 1920, the actual control of the storage and issue of its supplies in a somewhat modified form was restored to it. The list of articles to be stored and issued by the Medical Department was approved by the Secretary of War October 24, 1920. The list of articles to be procured by the Medical Department was approved by the Secretary of War under date of November 6, 1920. The actual procurements of the articles in this list were resumed November 15, 1920, in conformity with instructions from the Adjutant General of November 10, 1920.

The instructions necessary to effect the resumption of the control of storage and issue of medical supplies were transmitted on November 4, 1920, to medical supply officers of all depots where such

supplies were stored and to corps and department surgeons on November 6, 1920. Instructions regarding the classification of supplies and the preparation and routing of requisitions were issued November 13, 1920. Distribution areas were assigned to issuing medical supply depots November 18, 1920. Instructions covering the storage and issue of supplies in camps, posts, and stations were issued November 22 and 29 and instructions relative to biologicals and special laboratory chemicals November 30, 1920.

The personnel of the Medical Section, Quartermaster General's Office, consisting of two officers and five clerks, was transferred to the Surgeon General's Office November 15, 1920, in carrying out the provisions of General Orders, No. 66, W. D., November 3, 1920, and became the Storage and Issue Section of the Finance and Supply Division on that date. Owing to the enforced reduction of personnel in the office of the Quartermaster General and under the reorganizations in that office, the Medical and Hospital Procurement Section was consolidated with the Medical and Hospital Storage and Issue Section, and procurements were decentralized to the depots, the central office maintaining only general supervision of both procurements and issues.

Because of the incompleteness of the records of stock balances at the depots and in the central office, the medical supply officers at all general intermediate, reserve, and area depots were, on November 4, 1920, directed to begin a running inventory of stock and to report to the Surgeon General the results thereof by classes, as rapidly as such inventories could be completed. A second inventory to be taken as soon as the first was completed was required in order to check the correctness of the first and to correct any discrepancies found. The quarterly stock report of March 31, 1921, represented the results of this second inventory.

A tentative revision of the standard list of articles to be stored and issued by the Medical Department was distributed December 14, 1920. This list contained a number of new items and discontinued a number of those formerly in use making it necessary to correct the stock cards in all depots and the consolidated stock cards in the central office. It was necessary to determine accurately the various quantities of supplies, where they were stored, the articles which could be substituted for standard items and which of the nonstandard items were to be retained for issue. The question of war reserve had to be determined and the quantities for such purpose to be set aside at each depot. The nomenclature of the various items, as submitted from the depots, were faulty in a great number of items, due to lack of knowledge and care in keeping records, and had to be corrected. As a result of the entry of the articles under different nomenclature, large quantities reported on hand, were, when unpacked, found to be entirely different articles.

The depots were required to submit replenishment requisitions in time to reach the office by February 28. In the early part of April these requisitions had all been consolidated, compared with the stock report of March 28, distribution ordered on those items shown in excess at one depot and in deficiency at another, and procurement instructions for the purchase of such supplies as were necessary to replenish stock were issued.

Considerable difficulty in the distribution of supplies was experienced from March to June, 1921, due to a shortage of transportation funds, and it became necessary to suspend shipments until after the beginning of the next fiscal year. However, no acute shortages developed except in a few items in the insular possessions and they were met by local purchases.

Pursuant to instructions of December 10, 1920, from The Adjutant General, the control of the sale and other disposition of surplus medical and hospital supplies was transferred from the office of the Quartermaster General to the office of the Surgeon General and an organization was developed in the Finance and Supply Division to handle this additional work. The cost of the total amount of medical and hospital property which had been declared surplus prior to January 1, 1921, was estimated by the Quartermaster General to have been $28,830,953. Of that amount, property costing approximately $22,930,950 was reported to have been sold, transferred, or withdrawn for use of the Army, leaving a balance of $5,900,003. This property was stored in the various general intermediate, corps area, and reserve depots. The medical supply officers at these places were directed to report available balances, based on a physical check of the surplus property on hand, January 1, 1921. This check showed an actual balance amounting to $8,826,358. A study of this balance showed it to consist largely of materials which did not move readily, had little sales value, and for which small returns could be expected. It may, therefore, be assumed that the desirable property or those articles having a ready sale were included in the $22,930,950 reported as having been sold. Owing to the confusion which existed in the records at the time this property was transferred, no attempt at advertising on a large scale was made until April 5 when 2,416,114 yards of muslin and 2,123,760 yards of gauze were sold. This sale was followed by a sale of drugs and chemicals on May 18 and of miscellaneous supplies on June 23. The returns from sales of surplus Medical Department property have been unsatisfactory due, for the most part, to the marked business depression, after the first of the year, which prevented the movement of any large quantities of stock. Difficulty was experienced in securing prompt clearance. With the falling market buyers demanded quick action and sales were lost by the length of time which necessarily lapsed between the making of the bid and closing the sale. The difficulties of making sales were increased by shortage in the personnel available for the preparation of complete inventories, handling of correspondence, and preparation of the materials for sale. Negotiations for the disposal of the entire surplus as one sale were considered, but did not come to a successful issue, due to the low offers presented. In addition to the surplus supplies transferred to the Medical Department January 1, 1921, other supplies costing $1,177,898.98 were declared surplus between that date and June 30. During the same period supplies costing $1,853,552.81 were transferred to other departments of the Government and to other bureaus of the War Department, $150,816.41 were withdrawn from surplus, and $534,386.41 were sold, leaving a balance of $7,465,501.95 on hand June 30, 1921.

The administrative examination of certain classes of claims continued to be made during the year. A considerable part of the work was devoted to claims originating in the fiscal years 1917 to

1920, inclusive. Many claims for supplies and services furnished during the war were received during the year. Such claims continue to be received in diminishing numbers. With a very few exceptions, probably less than a half dozen, all claims on hand June 30, 1920, were settled during the year. The few that remained were held for data which it has so far been found impracticable to obtain. During the year 5,478 vouchers were approved for payment by the finance officer, 110 disapproved, 69 sent to the proper accounting officer of the Treasury Department for settlement, and 38 otherwise disposed of, making a total of 5,695. Of the vouchers approved for payment by the finance officer, $95,294.29 were chargeable to the appropriation for the fiscal year 1920 and $30,560.91 to appropriations for prior fiscal years. Quite a number of claims for the treatment of military personnel in civil hospitals while on furlough continue to be received. The claimants in such cases are notified that under the provisions of law their claims are not payable from public funds.

At the beginning of the fiscal year there were 1,824 civilian employees on the rolls of the Medical Department at large. These employees were on duty at general and station hospitals, at corps and department surgeons' offices, the Army Medical School, and at attending surgeons' offices. There were 1,831 persons employed during the fiscal year 1921, including those on duty at medical supply depots which came under the jurisdiction of the Medical Department November 15, 1920. There were discharged during the year 2,060 employees leaving 1,242 on the rolls June 30, 1921. For these services $558,053.73 were paid to those on duty in the hospital service, $322,152.82 to those on duty in the depot service, and $417,988.67 to those in the administrative service, making a total of $1,298,195.22 for the pay of employees. Of the sum paid to depot employees $40,019.40 was paid from the appropriation medical and hospital department and $280,133.42 from the appropriation inland and port storage and shipping facilities. The difficulties experienced during the preceding year in obtaining enlisted personnel sufficiently educated and trained to fill the positions occupied by civilian employees at general and station hospitals continued during the year.

Under the provisions of the sundry civil act approved June 5, 1920 (41 Stat. 881), the method of settling the accounts of beneficiaries of the Bureau of War Risk Insurance treated in Army hospitals was materially changed. Under the new procedure funds of that bureau are transferred to the War Department for direct disbursement. At those Army hospitals where beneficiaries of the Bureau of War Risk Insurance are treated, all operating expenses except those chargeable to pay of the Army, subsistence, and those involved in repair and maintenance of buildings are prorated on the basis of the number of days' care and treatment furnished the respective classes of patients; that is, the percentage which the patient days of either class is of the total number of patient days, calculated separately for each hospital. The pay of officers, nurses, and enlisted men was not considered in determining the expenses of these hospitals, since the strength of the Army was not increased thereby. Subsistence charges were paid into the hospital fund at the several hospitals in the same manner as the commutation of rations of enlisted men sick in hospital and charged directly against the funds

received from the Bureau of War Risk Insurance. The other expenditures were adjusted on the books of the accounting officers of the Treasury upon statements submitted from time to time by this office through the Quartermaster General and the Chief of Finance. The proper appropriations of the Quartermaster Corps and the Medical Department were credited and the funds of the Bureau of War Risk Insurance debited with such sums as were appropriate. The director of the bureau was furnished a copy of the statements accompanied by lists of beneficiaries treated at each institution showing for every such beneficiary the dates of admission and discharge and the number of days' treatment received.

There were 211,543 days' treatment furnished beneficiaries of the Bureau of War Risk Insurance in Army hospitals during the year ending June 30, 1921, at an average cost, for all classes of pathological conditions treated and for all hospitals where such treatment was furnished, of $3.50 per day. Of this sum $0.997 represents subsistence charges, $0.883 supplies and services furnished by the Medical Department, and $1.62 supplies and services furnished by the Quartermaster Corps. The rate was not uniform throughout the service, but varied at each hospital.

FINANCIAL STATEMENT.

MEDICAL AND HOSPITAL DEPARTMENT, 1921.

Appropriated for the fiscal year 1921	$3,500,000.00
Refundments during the year	120,309.67
Total to be accounted for	3,620,309.67
Disbursed during the year	1,943,646.15
Outstanding bills	910,861.06
Reserve	200,000.00
Unobligated balance	565,802.46
Total accounted for	3,620,309.67

MEDICAL AND HOSPITAL DEPARTMENT, 1920.

Balance on hand July 1, 1920	$2,477,376.09
Refundments during the year	264,376.12
Total to be accounted for	2,741,752.21
Disbursed during the year	1,855,196.04
Outstanding bills	483,365.76
Unobligated balance	403,190.41
Total accounted for	2,741,752.21

MEDICAL AND HOSPITAL DEPARTMENT, 1919.

Balance on hand July 1, 1920	$75,774,750.11
Refundments during the year	551,904.60
Total to be accounted for	76,326,654.71
Disbursed during the year	3,277,713.60
Balance in Treasury June 30, 1921	710.00
Carried to surplus fund, June 30, 1921	73,048,231.11
Total accounted for	76,326,654.71

MEDICAL AND HOSPITAL DEPARTMENT, 1918.

Balance on hand July 1, 1920	$6,778,666.74
Refundments during the year	31,662.33
Total to be accounted for	6,810,329.07
Disbursed during the year	53,702.61
Carried to surplus fund June 30, 1921	6,756,626.46
Total accounted for	6,810,329.07

MEDICAL AND HOSPITAL DEPARTMENT, 1917–18.

Refundments during the year	$924.38
Total to be accounted for	924.38
Carried to surplus fund June 30, 1921	924.38
Total accounted for	924.38

REPLACING MEDICAL SUPPLIES, 1921–22.

Amounts accruing to this fund during the year	$107,980.47
Disbursed during the year	14,100.27
Unobligated balance	93,880.20
Total accounted for	107,980.47

REPLACING MEDICAL SUPPLIES, 1920–21.

Balance on hand July 1, 1920	$783,145.71
Amounts accruing to this fund during the year	506,351.57
Total to be accounted for	1,289,497.28
Disbursed during the year	324,921.99
Outstanding bills	164,615.61
Unobligated balance	799,959,68
Total accounted for	1,289,497.28

REPLACING MEDICAL SUPPLIES, 1919–20.

Balance on hand July 1, 1920	$1,769,648.63
Amounts accruing to this fund during the year	32,289.54
Total to be accounted for	1,801,938.17
Disbursed during the year	609,757.63
Unobligated balance	1,192,180.54
Total accounted for	1,801,938.17

REPLACINC MEDICAL SUPPLIES, 1918–19.

Balance on hand July 1, 1920	$425,797.33
Amounts accruing to this fund during the year	3,574.03
Total to be accounted for	429,371.36
Carried to surplus fund June 30, 1920	429,371.36

REPLACING MEDICAL SUPPLIES, 1917–18.

Amounts accruing to this fund during the year	$381.73
Carried to surplus fund June 30, 1921	381.73

HOSPITAL CARE, CANAL ZONE GARRISONS, 1921.

Appropriated for the fiscal year 1921	$60,000.00
Total to be accounted for	60,000.00
Disbursed during the year	21,243.66
Outstanding bills	17,919.00
Unobligated balance	20,837.34
Total accounted for	60,000.00

HOSPITAL CARE, CANAL ZONE GARRISONS, 1920.

Balance July 1, 1920	$42,633.04
Total to be accounted for	42,633.04
Disbursed during the year	11,186.32
Unobligated balance	31,466.72
Total accounted for	42,643.04

HOSPITAL CARE, CANAL ZONE GARRISONS, 1919.

Balance July 1, 1920	$56.00
Carried to surplus fund June 30, 1921	56.00

ARMY MEDICAL MUSEUM, 1921.

Appropriated for fiscal year 1921	$20,000.00
Disbursed during the year	7,905.44
Bills outstanding	12,086.56
Unobligated balance	8.00
Total accounted for	20,000.00

ARMY MEDICAL MUSEUM, 1920.

Balance July 1, 1920	$5,995.53
Refundments during the year	16.44
Total to be accounted for	6,011.97
Disbursed during the year	5,985.51
Unobligated balance	26.46
Total accounted for	6,011.97

ARMY MEDICAL MUSEUM, 1919.

Balance July 1, 1920	$41.05
Carried to surplus fund June 30, 1921	41.05

LIBRARY, SURGEON GENERAL'S OFFICE, 1921.

Appropriated for fiscal year 1921	$20,000.00
Total to be accounted for	20,000.00
Disbursed during the year	5,262.67
Outstanding bills	14,134.88
Unobligated balance	602.45
Total accounted for	20,000.00

LIBRARY, SURGEON GENERAL'S OFFICE, 1920.

Balance July 1, 1920	$15,342.00
Refundments during the year	3.75
Total to be accounted for	15,345.75
Disbursed during the year	7,490.37
Outstanding bills	3,877.54
Unobligated balance	3,977.84
Total accounted for	15,345.75

LIBRARY, SURGEON GENERAL'S OFFICE, 1919.

Balance July 1, 1920	$1,003.34
Refundments during the year	194.36
Total to be accounted for	1,197.70
Disbursed during the year	295.00
Carried to surplus fund June 30, 1921	902.70
Total accounted for	1,197.70

ARTIFICIAL LIMBS, 1921.

Appropriated for fiscal year 1921	$150,000.00
Refundments during the year	50.00
Total accounted for	150,050.00
Disbursed during the year	125,292.00
Outstanding bills	1,578.00
Unobligated balance	23,180.00
Total accounted for	150,050.00

ARTIFICIAL LIMBS, 1920.

Balance on hand July 1, 1920	$12,922.00
Disbursements during the year	11,803.00
Unobligated balance	1,119.00
Total accounted for	12,922.00

ARTIFICIAL LIMBS, 1919.

Balance on hand July 1, 1920	$5,029.45
Disbursements during the year	3.00
Carried to surplus fund June 30, 1921	5,026.45
Total accounted for	5,029.45

APPLIANCES FOR DISABLED SOLDIERS, 1921.

Appropriated for the fiscal year 1921	$500.00
Disbursed during the year	488.51
Outstanding bills	3.00
Unobligated balance	8.49
Total accounted for	500.00

APPLIANCES FOR DISABLED SOLDIERS, 1920.

Balance on hand July 1, 1920	$707.80
Disbursed during the year	204.79
Outstanding bills	203.01
Unobligated balance	300.00
Total accounted for	707.80

APPLIANCES FOR DISABLED SOLDIERS, 1919.

Balance on hand July 1, 1920	$452.55
Carried to surplus fund June 30, 1921	452.55

TRUSSES FOR DISABLED SOLDIERS, 1921.

Appropriated for fiscal year 1921	$1,000.00
Disbursed during the fiscal year	747.73
Outstanding bills	68.00
Unobligated balance	184.27
Total accounted for	1,000.00

TRUSSES FOR DISABLED SOLDIERS, 1920.

Balance on hand July 1, 1920	$1,004.67
Refundments during the year	2.90
Total to be accounted for	1,007.57
Disbursed during the fiscal year	233.83
Outstanding bills	170.84
Unobligated balance	602.90
Total accounted for	1,007.57

TRUSSES FOR DISABLED SOLDIERS, 1919.

Balance on hand July 1, 1920	$1,052.41
Disbursed during the fiscal year	3.00
Carried to surplus fund June 30, 1921	1,049.41
Total accounted for	1,052.41

LIBRARY OF THE SURGEON GENERAL'S OFFICE.

During the fiscal year 1920–21 there were added to the collection in the library 3,067 bound volumes, 579 unbound volumes, 15,111 pamphlets, and 182 portraits of physicians. The library now contains a total of 241,846 bound volumes, 36,075 unbound volumes, 382,036 pamphlets; in all, 659,957 catalogued items and also 6,259 portraits.

There was received in addition 1,157 different periodicals, 354 annual reports, 169 medical engravings and prints, 306 miscellaneous photographs, and 358 medical caricatures, 204 volumes were rebound and 1,296 collections of periodicals and pamphlets bound. One hundred and sixty-one incunabula now in the possession of the library.

Practically all of the medical periodicals of the old central empires have been obtained and the library files are now up to date. There is a heavy shortage, however, of books and theses from German and Austrian sources because of the fact that during the war period small additions was the rule and no second editions were issued. Effort is being made to obtain all the important works published during the war period. This will be a slow and expensive process on account of the rarity and high price of these items.

Index catalogue.—Material for the third volume, third series of the index catalogue of the Surgeon General's library, is now in the hands of the Public Printer. A separate report, with certain recommendations for changing the method of publishing this volume, has been submitted.

Loans.—The number of loans by the library have been increased more than 100 per cent over that of the prewar period. Readers and research workers have increased materially. The various Government bureaus are also making a greater use of the library than at any time in the past.

Civilian personnel.—There are at present on the rolls of the library, exclusive of the assistant librarians, 18 clerks, which is 7 less than the prewar force. That this number of clerks has been able to carry on the work of the library, which has increased over that of previous years, is due to the fact that they are younger and more active and are actuated by the spirit of service. They are, however, at the limit of their capacity, and with the increase in the output of medical literatures and the consequent increase in the clerical work of checking, indexing, and cataloguing of this material, it will be necessary to increase the force. It is therefore recommended that, beginning with the fiscal year 1923, that is, July 1, 1922, two additional clerks be allowed the library.

The services that the library renders to the profession of the world can not be overestimated, and it is highly desirable that this service be continued for all time. The force at present is not more than sufficient for the routine duties to which they are assigned, and understudies for important positions are not available. One of the most important positions is that of the principal assistant librarian (Dr. Alleman). His duties, the preparation of material for the index catalogue, are highly technical. There is no one on duty in the library with its knowledge of medicine and languages who could possibly fill the place should Dr. Alleman be incapacitated or retired. Provision should be made for this important position by the employment of a graduate in medicine who can be trained as an understudy. This case is cited to illustrate the weakness of the library, due to the lack of all reinforcement in so far as important positions are concerned. Another position now vacant is that of translator, the Civil Service Commission having been unable to certify any one to meet the requirements of the library.

Expansion of the library.—The stacks in the library hall and the reading room are congested; in the library hall there is stack space for not more than 2,500 additional volumes. In the reading room some additional storage space can be obtained by building additional stacks. Such stacks as have been constructed are of wood and are therefore undesirable. The decking over, or placing a shelf on top of the stacks in the library hall, would furnish some additional area, but that is an undesirable method of increasing storage space.

Improvements in the library.—Both the library hall and the reading room have been repainted. Rewiring in a manner to conform with the regulations of the Fire Underwriters Association is now in progress.

Finance.—The appropriation for the fiscal year 1922 was cut $5,000 under the appropriation of 1921, which was a 25 per cent reduction. A letter was subsequently received asking what other reductions in appropriations could be made. The only item that could be eliminated was that of library equipment, which last year amounted to $1,750. Should this amount be deducted from the appropriation for the fiscal year 1922, it would leave a balance of $13,250 (a net reduction of more than 33 per cent), for the purchase of periodicals, books, pamphlets, etc., which is insufficient to keep the library abreast of current medical literature. A scientific library, such as the library of the Surgeon General's office, when it is up to date, is of greatest value to the various Government bureaus and to the profession. Should the appropriation be cut to a point that this is impossible, the library would not only lose its present high position, but the Government would not save money, for this library now supplies all Government bureaus with material by loans. Such material if not available here would be subscribed for by several different bureaus, resulting in duplications of orders.

This is the greatest medical library in the world. Its collection of ancient and modern medical works is unequaled in the United States, and under no circumstances should it be permitted to lose this status. The appropriation to keep the library in its present position should never be less than $20,000 per year. Should the funds available be insufficient, the library can not obtain these publications that are available and are essential. Many of these items are offered but once. If there are no funds to purchase, the library will be forced to go without many of the modern valuable publications, and also without those rare and old books and manuscripts on medicine and its closely allied sciences which are so valuable for research and historical work, and which are the pride of all libraries that are fortunate enough to possess any of them.

THE CORPS AREAS AND MILITARY DEPARTMENTS.

The military departments in the United States were discontinued and the corps areas established by General Order No. 50, War Department, August 20, 1920, which was in part as follows:

I. *Establishment of corps areas.*—By direction of the President, the following is issued to take effect September 1, 1920:

1. In accordance with section 3 of the act approved June 4, 1920, the following corps areas are established for purposes of administration, training, and tactical control.

The headquarters on December 31, 1920, and the corps area surgeons were as follows:

Corps areas.	Headquarters.	Corps area surgeons.
First	Boston, Mass	Col. Jefferson R. Kean.
Second	Governors island, N. Y	Col. Charles M. Gandy.
Third	Fort Howard, Md	Col. Alexander N. Stark.
Fourth	Fort McPherson, Ga	Col. Powell C. Fauntleroy.
Fifth	Fort Benj. Harrison, Ind	Col. James Sprigg Wilson.
Sixth	Fort Sheridan, Ill	Col. Champe C. McCulloch, jr.
Seventh	Fort Crook, Nebr	Col. Henry Page.
Eighth	Fort Sam Houston, Tex	Col. Francis A. Winter.
Ninth	San Francisco, Calif	Col. Guy L. Edie.

Maj. (Col.) Earl H. Bruns was chief surgeon of the American Forces in Germany, from January 1 to September 20, when he was relieved by Col. Frank R. Keefer, who was chief surgeon at the end of December, 1920.

In the oversea departments the following medical officers served as department surgeons during the year: Panama Canal, Col. Henry S. Greenleaf; Philippine Islands, Col. William B. Banister; and in the Hawaiian Department, Col. Charles L. Wilcox.

Many interesting observations were recorded in the annual reports furnished this office by the corps area and department surgeons. It is from these reports that the material, which follows, was abstracted.

CORPS AREAS IN THE UNITED STATES.

COMMISSIONED PERSONNEL.

First Corps Area.—The year 1920 has been one of much change and disturbance in the medical personnel, both commissioned and enlisted, because of the discharge of the commissioned officers and enlisted men brought into the Army for the war, and by reason of the reorganization of the Army, effected in pursuance of the act of June 4, 1920.

The number of Medical Department officers at present on duty in this area is sufficient for present needs, with the exception of Fort Ethan Allen, Vt., and the coast defenses of Long Island Sound, at each of which an additional officer is needed. The strength of the present command at Fort Ethan Allen is approximately 800. The presence

of two officers of the Medical Corps is hardly sufficient to meet the needs of so large a post, especially during the winter months. In addition to the command there is a large civilian personnel.

Two officers of the Medical Corps, both recently appointed, are present for duty in the coast defenses of Long Island Sound. These defenses include Fort H. G. Wright, N. Y., Fort Terry, N. Y., and the subpost of Fort Michie, N. Y., all island posts, with a combined strength of approximately 450 officers and enlisted men, in addition to which are the families of officers and enlisted men. On account of the isolated position of these posts, another medical officer should be stationed at Fort H. G. Wright. Army nurses are stationed at Camp Devens and Fort Banks.

Locum tenens.—In each of the reports of the Surgeon General from 1913 to 1917, inclusive, appeared the paragraph "An officer of the Medical Officers' Reserve Corps residing in the vicinity of each military post has been designated as a locum tenens, and the policy has been adopted of calling such officer into active service for duty at his post when all the regular medical officers thereat are called upon to accompany troops into the field." This valuable policy appears to have been lost sight of during the World War, yet it is more important and necessary now than at any previous time, because the deficiency of regular medical officers is greater now than ever before. It is important that locum tenens should be medical practitioners of established reputation and living in the immediate vicinity of the posts. Such men naturally can not be expected to give up their whole time to the Government when called temporarily into active service, since this would be destructive to their private practice. This, however, will not be necessary for the performance of their ordinary duties as station surgeons in the absence of most of the garrison in the field. They should, however, be called into active service, as an arrangement for payment by the visit, under A. R. 1476, precluded their giving medical service to the women and children of the post, but they should be permitted to keep in touch with their private practice in addition to their duties as station surgeons.

It is understood that the tentative regulations for appointments in the Reserve Corps exclude men who have had no former military service and who are not Reserve Officers' Training Corps graduates. This appears to be, as far as the Medical Corps is concerned, an unfortunate and unnecessary limitation. Some medical practitioners had to remain at home during the war to care for the civil population and to perform the important and difficult duties of medical members of draft boards. These are, in some cases, the only men living in the vicinity of Army posts who have the necessary professional qualifications for "locum tenens." It is hoped that this restriction may be removed in the near future.

There do not appear to be available Medical Reserve Corps Officers living in the immediate vicinity of Forts Adams, Greble, and Constitution. Forts Strong and Warren being on islands in Boston Harbor are too inaccessible for a practitioner to give a satisfactory medical service to them without giving up his private practice. For the other posts suitable "locum tenens" have been selected.

Second Corps Area.—The corps area surgeon reports that many factors have contributed to confusion and loss of efficiency in the

medical service under the control of this office, and this has extended to the commissioned personnel. During the first half of the year the large temporary personnel was naturally imbued with a spirit of uncertainty and consequent unrest. Those who did not desire to remain permanently in the service were anxious for discharges in order that they might establish themselves in civil life; those who hoped to remain permanently in the service were uncertain as to the legislation which would effect them, and after this was settled the uncertainty was transferred to the character of the examination to be passed and the probability of appointment. With the permanent commissioning of the new officers and the discharge of those holding temporary commissions the situation has improved. In addition to the greater permanency of assignment made possible thereby, the newly appointed officers have acquired a feeling of stability and are adapting themselves to the conditions and are gradually acquiring the traditions of the Medical Corps of the regular establishment. It is recommended that as rapidly as possible each of the newly commissioned medical officers be given a course of instruction at the Army Medical School; also that all officers of this class be given tours of duty with larger commands where they will be subordinated to experienced officers of the Medical Corps.

There is an insufficiency in the number of medical officers on duty at stations in the corps area. At present it is impracticable to assign more than one medical officer to any of the stations in the western portion of the corps area. This results in having no one in that territory available for an emergency, and also makes it exceedingly difficult to convene boards of medical officers for certificates of disability and other purposes.

Fifth Corps Area.—The general efficiency of these troops has been excellent, if consideration is given to the number of newly appointed medical officers and newly enlisted men who have had little opportunity for instruction.

Eighth Corps Area.—The maximum number of medical officers in the Eighth Corps Area during the year 1920 was 223; the minimum number 132; and on December 31 there were 137. The losses during the year aggregated 206, as follows: By discharge, 117; transfer, 81; resignation, 4; retirement, 2; and death, 2. Of the losses, 104 occurred during the months of September, October, and November, and most of these were incident to the legislation affecting emergency officers. This produced an acute shortage and involved the consolidation of regimental and hospital personnel and the frequent shifting of medical officers in the effort to keep the troops supplied with medical attendance.

Coincident with these changes the recruiting drive developed, which resulted in an increase of several thousand men in the area. The added burden placed upon an already overworked and inadequate personnel by the large number of recruits needs no comment. The situation may be illustrated by the fact that at one time there were 13,000 troops with the Second Division, and only 13 medical officers attached to that organization. The disposition and effort of the medical officers to carry on this work under such adverse conditions, and their spirit of cooperation in attempting to meet the situation, are noteworthy.

Special and technical services have been maintained in all of the larger hospitals. To meet the many demands for special treatment for eye, ear, nose, and throat cases, and to avoid the transferring of large numbers of patients, an itinerant specialist was detailed to visit at intervals the different stations at which patients had been assembled. The results of this plan have been satisfactory.

The policy of the War Department to leave in the hands of the corps area commander the assignment of medical officers ordered to this area has proven most satisfactory, and has been especially helpful in meeting local situations, which required constant readjustment of personnel.

Ninth Corps Area.—While the condition is presumed to be general, and not peculiar to this corps area, it may be well to place on record the fact that the operation of the Medical Department during the past year has been handicapped by:

(*a*) The discharge of many emergency officers; (*b*) entry of newly appointed officers; and (*c*) by the loss of many of the older and more experienced noncommissioned officers who were commissioned in the medical administrative corps or received warrant officer appointments, not a few of the latter being entirely lost to the Medical Department. The conditions noted above have required frequent changes in personnel at the various stations, with consequent lack of that continuity of administration and responsibility so essential to efficiency. Thus Medical Department instruction proper is in general unsatisfactory. Instructors themselves need instruction and have been, of necessity, changed too frequently to produce effective results.

ENLISTED PERSONNEL.

First Corps Area.—The enlisted strength of the Medical Department has been maintained above the minimum requirements of A. R. 1417. The improvement and increased complexity of the medical service of the Army in recent years has caused this allowance to be inadequate and the Regulations should be changed to provide for a larger number.

A serious shortage of noncommissioned officers was caused by a telegraphic order received on June 29, 1920, requiring the discharge, on July 1, 1920, of all noncommissioned officers holding temporary warrants given during the war. As many of the warrants afterwards decided to be temporary were absolutely identical in form with the permanent, much confusion and dissatisfaction resulted. Five posts in the area were left without medical noncommissioned officers, and at one important post, Fort Adams, a sergeant of the line had to be placed in command of the hospital detachment. This condition continued until examinations could be held and new appointments made, after the reference of the examination papers to Washington—a period of more than two months. As most of the enlisted men are recruits, enlisted within the year, much difficulty has been found in obtaining suitable material for promotion to the several grades of noncommissioned officers. The corps area still lacks a master sergeant and six sergeants for a satisfactory quota of noncommissioned officers.

Second Corps Area.—On account of the large number of newly enlisted and inexperienced men, their low mentality, and the small

number of experienced noncommissioned officers at the posts, the efficient administration of the station hospitals has been handicapped. There has also been a serious shortage of dispensary, X-ray, laboratory, and dental technicians. The main problems in connection with enlisted personnel have been the reenlistment and training of recruits.

The different posts were also handicapped by the spirit of unrest of those temporary noncommissioned officers who were reduced on or before July 1, 1920. All of these factors had a tendency to demoralize the new men, as well as the old ones.

Fort DuPont, Del.—The detachment in general has been inferior. However, the more inefficient have been discharged. The additional personnel gained by enlistments is more promising. A gradual improvement has been noted and it is believed that within a reasonable time the detachment will prove satisfactory. Of those examined by the fort commander 83 per cent were found proficient in Class A subjects. The men enlisted for a period of three years are more satisfactory, as the one-year men are just becoming useful when their term of enlistment expires. Discipline has been good.

Fort Jay, N. Y.—The instruction of the detachment in class work has not been altogether satisfactory. The vocational training of the educational and recreational service has taken up the afternoon from 1 p. m. to 4:30 p. m. for those attending, and some men have to be retained on routine duties, leaving no great number for class work. Hospital service does not adapt itself to vocational training, except where such training can be given in connection with hospital duties. The detail of men from such detachments for this work has a demoralizing effect, by allowing certain men to escape the performance of necessary though unpleasant duties.

Camp Dix, N. J.—There have been detachments of the Medical Department on duty at the various infirmaries and at the station hospital. The number of men has been adequate. The fact that a great many of them are one-year enlistments prevents their assimilating the training necessary to fit them to carry on the various duties of the Medical Department. Training has been carried out according to the schedule laid down in the manual for the Medical Department. In addition, the men have taken advantage of the courses in general education taught by the educational and vocational schools and also of the various technical courses offered.

Fifth Corps Area.—In a general way the personnel of the Medical Department has not been satisfactory, although the enlisted force has been adequate in number; the first reason being, the constant loss of the personnel by discharge from emergency commission and by expiration of term of enlistment; and the second, the lack of all organization, except that of the old-fashioned detachment at posts or stations. The average commissioned strength, Medical Department, for the four stations reported upon during the four months period has been 50 officers of all Medical Department branches.

Preparedness for war.—The rating in preparedness of the sanitary troops in this area is very low, owing to the great number of recruits, paucity of personnel, untrained noncommissioned officers, and lack of organization. This, however, will be remedied as soon as a large camp is organized, and in this camp a medical regiment formed which will be the nucleus of a training center.

Training.—Training of the enlisted force, Medical Department, has followed as nearly as possible that described in the manual for the Medical Department, modified to meet existing conditions. Special attention has been given to the subject of field training, as directed in the training order for troops of this area (par. 18, General Orders, No. 1, Headquarters, Fifth Corps Area, Jan. 1, 1921).

Sixth Corps Area. Camp Grant, Ill.—There has been a scarcity of enlisted personnel of the Medical Department at this camp which has necessitated the exploitation of each man and has permitted of little general training. The exception to this is the sixth sanitary train, which, since its reorganization in February, has strictly adhered to an excellent training schedule.

Fort Wayne, Mich.—Daily classes were held for instruction in the school of the soldier, followed by classes for instruction in the technical duties of Medical Department men, and later by drill and field work.

Camp Custer, Mich.—The sanitary troops were, with very few exceptions, all new recruits at the beginning of the year. During the spring and summer months about two hours a day were devoted to training.

Fort Sheridan, Ill.—This station was a general hospital until September 30, 1920, and very few of the enlisted men, Medical Department, now on duty there have had any instruction or field work.

Attending surgeon's office, Chicago, Ill.—The only training received by the enlisted personnel on duty in this office is such as goes with the routine performance of their duties—dispensary, laboratory, dressing room, and clerical work.

Seventh Corps Area.—The shortage of noncommissioned officers has been very embarassing. The absence of the type of men available before the war, with the inexperience and want of force on the part of many of the noncommissioned officers in service, explains the inefficiency often found in hospitals and medical units. The necessity for noncommissioned officers has been so insistent that it has been planned to establish if possible a short intensive course of instruction for selected privates with a view of obtaining material for the lower grades. So far the insufficiency of personnel for instructors and the inability to obtain a suitable center has prevented it. In this area, with a small number of troops, with enormous distances separating them, the project may be attempted only on a limited scale. Experience has proven, however, that the value of an enlisted man in the Medical Department can be immeasurably increased by an all-time school lasting 30 days, during which purely military exercises occupy 60 per cent, theoretical medicine 20 per cent, and learning how to play 20 per cent of the time. This last item could perhaps be increased because the employment of leisure hours is an art that few have mastered and all should acquire.

Efficiency of sanitary troops.—No inspection of these organizations was made. The seventh sanitary train apparently was being given good training and its equipment was ample. This train has moved out of the area. All observers report upon the poor quality of the present-day recruit. As many of these were one-year men their training seemed and proved to be hopeless. With a better class of

men being recruited for a longer service the prospect of sanitary efficiency is bright.

Eighth Corps Area.—The area has been somewhat better off with respect to enlisted men, although the problem of utilizing the limited resources to the best advantage has been ever present. The scarcity of noncommissioned officers, and especially those of experience, has been felt. The total number of enlisted men in the area has varied from 1,450 to 1,845. On December 31st there were 1,499 privates and privates first class and 219 noncommissioned officers.

The instruction of the personnel, as outlined in the Manual for the Medical Department, has been urged, but has been largely not complied with. This condition has in all instances been readily accounted for by the small size of the various detachments, press of work, diminished capacity of the individuals as judged by prewar standards, and interference with military duties by educational and vocational training.

In keeping with the policy of giving the enlisted personnel as much hospital training as practicable, large detachments have been assigned to the station hospital, Fort Sam Houston, from the medical regiment at Camp Travis. It is considered that this training will be of special benefit to these men as members of a sanitary train.

Ninth Corps Area.—The numerical strength of post detachments has been kept up, but the quality leaves much room for improvement.

The development of noncommissioned material will require considerable interest and attention for many years if we are to return to the prewar standards. The intensive "recruiting drives" of the past year have placed in the ranks of the Army (including the Medical Department) too many immature, irresponsible, and illiterate boys. The one-year enlistment is not long enough to give them vocational and educational, as well as professional, training. Too many men have enlisted under the delusion that military duty and instruction were merely secondary to educational and vocational training.

Specialist ratings.—This office apportioned to stations the full allotment of specialist ratings made to this area. At some stations the surgeon did not rate up to his full apportionment, while from others there were requests for additional ratings. Requests for additional ratings came from stations where there is considerable recruiting, Vancouver Barracks, Fort MacArthur, Presidio of San Francisco, and Fort Douglas. Where, after a reasonable time, surgeons failed to utilize their quota, a portion was transferred to other stations. The Medical Department is doing a large amount of clerical work for the Recruiting Service, and it seems only reasonable that the War Department should make an additional allotment of ratings to cover this work at recruit depot posts, such as those mentioned above. These ratings should be in the fourth and fifth classes.

The number of ratings allowed at present is inadequate for Medical Department work proper. The number of ratings in the fourth and fifth classes should be increased. The fifth and sixth classes give little more than what the soldier formerly received under the old system of additional pay as surgical assistant, etc., and promotion only occurs when the man obtains a rating above the fifth.

Until the service as a whole becomes stabilized by elimination of the one-year enlistment, it will not be possible to develop many

"specialists." Most of the one-year men are enrolled in educational and vocational courses, throwing much of the work of hospitals on the older or reenlisted soldiers, who become dissatisfied with the Medical Department and leave it for other branches. Specialists can be developed in a one-year enlistment, but to do this, the soldier's entire time must be devoted to Medical Department instruction and work.

UNDESIRABLE CHARACTER OF RECRUITS.

Sixth Corps Area. Camp Grant.—Never in the history of the Army has its ranks been filled with such poor physical specimens and such young lads so susceptible to disease. And this is particularly true of this post. Yet the sick rate and mortality rate of this command for the past year will compare most favorably with the Army as a whole, or with any of its garrisons.

Eighth Corps Area.—The heavy rate of discharge on surgeon's certificate of disability for disability existing prior to enlistment, with consequent inevitable increasing liability of the Government in matter of pension, compensation, etc., suggests a reconsideration of the policy regarding the strict appliance of adherence to published and official physical standards.

Second Corps Area.—Camp Dix, N. J.—It has been noted that a large majority of the cases appearing before the certificate of disability board have disability which existed prior to enlistment, and a number of cases have been previously discharged from the military service for the same disability. It would seem that a great deal of laxity existed in the recruiting system which permitted the enlistment of these men. The majority of cases have been in the service considerably less than a year, in most instances only a few months, and have had more or less extensive hospitalization before being brought before the board. They have in reality been available for very little actual service.

Philippine Department.—Many comments have been offered by medical officers in regard to the inferior mental and physical class of enlisted men taken into the service. The commanding officer of the Sternberg General Hospital reports: "Many of the enlisted personnel of this command should have never been enlisted, as they are poorly developed physically, mentally, and morally, which increases the difficulties encountered in controlling venereal disease." This is markedly applicable to the replacements for the Siberian Expedition and had a decidedly unfavorable influence on the venereal rate of this department for 1920.

SANITATION.

First Corps Area.—As a result of sanitary inspections in this corps area, the corps area sanitary inspector reports as follows:

There has been no marked change in sanitary conditions at military stations within the First Corps Area during 1920, but it is believed that there has been a slow but steady improvement as personnel has become more settled and discipline improved.

General sanitation at all posts may be described as average, but improving. Compliance with certain sanitary requirements introduced within the last few years has not yet reached the status of established custom.

The head and foot arrangement of bunks and the avoidance of crowding in dormitories is practically universal and is enforced without great difficulty.

The actual boiling of dishes, followed by air drying, as prescribed in Bulletin 66, W. D., 1918, is difficult to enforce and there is a constant tendency to fall back to the time-honored custom of rinsing in lukewarm water and drying with dish cloths, which may or may not be clean. Constant improvement in this respect is, however, manifested.

The protection of the commands against typhoid and smallpox has, in some instances, been neglected and defective entries upon service records have been numerous. This condition is now practically corrected.

In many posts there is a conspicuous lack of any system for checking and following up the examination of food handlers.

Fourth Corps Area.—The corps area surgeon recommends:

1. That the capacity of all dormitories should be marked on the basis of 75 square feet of floor space and 750 cubic feet of air space. Nearly all squad rooms are now marked on the basis of 45 square feet of floor space and 500 cubic feet of air space, which was necessitated by the exigencies of war conditions, that do not now obtain.

2. That a standard 24-bed hospital should be constructed at Fort Morgan, Ala.

3. Surgeons of camps or stations should be required to keep a roster of all food handlers at each mess, post exchange, bakery, or other places where food is handled, this roster to be checked by the surgeon in person or by a medical officer designated by him, monthly. Nothing in this to be construed as relieving mess officers, etc., of the responsibility of promptly notifying the surgeon of any change among the food handlers.

4. The surgeon of each camp or station should be required to request of the commanding officer, in writing, every three months, that the organization commanders personally examine all service records to ascertain whether every soldier in the command is properly vaccinated against smallpox and immunized against typhoid-paratyphoid, *and that such organization commanders report in writing their action and findings.*

5. That in order to prevent, as far as possible, the communication of disease to posts and stations in this department from recruit depots, it is recommended:

(*a*) That all recruits be retained at depots for at least 30 days.

(*b*) That triple typhoid prophylaxis, consisting of three doses, be completed at the recruit depot.

(*c*) That each recruit receive a second vaccination against smallpox should the first vaccination prove unsuccessful.

(*d*) That no recruit be released from the depot for assignment elsewhere until the surgeon has certified that the recruit is free from contagious disease and is not a contact from such.

(*e*) That all official papers which ordinarily accompany the recruit from the depot to post or station to which assigned be finally inspected by the surgeon in order that he may verify the correctness of the entries which pertain to the physical condition of the recruit and which may have a bearing on him as a potential source of infection.

6. That all warrant officers so appointed from the Medical Department be assigned to duty in that department and not to other branches of the service.

Fifth Corps Area.—In general, the sanitary conditions in the corps area are as follows:

Public buildings.—These are in good condition, comfortable, and sanitary. Troops are quartered in cantonment wooden barracks with the exception of Fort Harrison, which is a modern post.

Water supply.—The water supply as a rule is sufficient in quantity and quality and is satisfactory.

Food supply and its preparation.—This is sufficient in quantity, and excellent in quality. The preparation, however, is not entirely satisfactory, owing to the limited number of qualified cooks. The quality of milk, both canned and fresh, is satisfactory.

Clothing.—The clothing is of good quality, but is not as satisfactory as that in use before the World War. Some complaints have been reported in regard to the fitting of garments and also of shoes.

Fort Benjamin Harrison, Ind.—The buildings are of modern brick construction and are in good repair. Some temporary buildings are

still in use as quarters, by the personnel, headquarters, Fifth Corps Area, and by soldiers. Other temporary buildings are being demolished.

Food handlers are inspected and dishes are washed as contemplated in War Department orders.

The clothing is reported as good, but the supply uncertain. The shoe stock during the last four months of the year was allowed to become so depleted that many men could not be properly fitted. The post laundry was reported as generally unsatisfactory, both inquality of service and in delivery. The surgeon reports that approximately 40 per cent of soldiers' laundry was done at private laundries at the soldiers' expense. Reports and recommendations were madeof the clothing and laundry defects.

Camp Knox, Ky.—The buildings are wooden, and are two stories high. They are generally satisfactory, but in need of painting and repairs. The hospital which occupies a regimental area with barracks as wards, which are heated by coal stoves, is unsatisfactory.

It was recommended that the incinerator for this station be pushed to completion; that the recent allotment of $13,500 for completion of the hospital be made immediately available; and that authority be granted for the employment at this station of an antimosquito squad, since this station has water on three sides, in addition to numerous ponds on the reservation, and should the anophelinæ which predominates become infected, an increase in the incidence of malaria is inevitable.

Sixth Corps Area.—Camp Grant, Ill.—The general character and condition of the buildings at this camp make the attainment of the ideal in sanitation impossible. The immense size of the camp with a comparatively small garrison adds to the difficulties. The water supply is from six driven wells. It is potable and free from contamination, but it is hard.

Head and foot sleeping with a minimum of 72 square feet of floor space and 720 cubic feet of air space, was observed without exception throughout the entire command. Ventilation was good. During the months of January, February, and March, nightly inspections of squad rooms were made. These precautions have undoubtedly reduced the morbidity from respiratory and sputum-borne diseases.

Seventh Corps Area.—A number of instances have been noted among the military personnel of inadequate protection against typhoid, paratyphoid, and smallpox, through failure to comply strictly with existing orders. The failure is apparently due largely to careless manner of making out the records, thus permitting individuals to occasionally escape successful and complete protection by vaccination. Some of this laxness is on the part of detachment and company commanders, and apparently General Orders No. 28, W. D., 1920, which requires semiannual inspection of records and report will remedy it.

Eighth Corps Area.—Records of smallpox vaccination and typhoid and paratyphoid prophylaxis.—Inspection has shown a widespread disregard of regulations in connection with the records of these measures. Constant effort is required to insure the up-to-date status of service records in this regard, to the end that the revaccination and reinoculation with consequent natural discontent on the part of the individuals concerned may be avoided,

Energetic action in this matter has been taken and it is expected and demanded that lapse in this matter will be comparatively infrequent hereafter.

Screening.—This has been found to be not entirely satisfactory, either in maintenance or installation, being in many cases entirely inadequate and a mere camouflage.

Mosquitoes and malaria.—Fort Brown and vicinity is the only locality where the incidence of malaria has been marked. A most energetic and successful campaign against malaria is being carried out at this station by Maj. Guy V. Rukke, M. C., under considerable difficulties, both as to material and administration, with the result that the incidence of this disease has been reduced to an extremely low figure.

Examination of food handlers.—The semiannual examination of food handlers as far as observed has not been rigidly carried out as required by Special Regulations No. 28, Changes 4, paragraph 6½. Defects in this regard are being rapidly corrected.

Water supply.—With the exception of Camp Stanley and Camp Stephen D. Little, water supplies have been very generally reported as satisfactory as to quality on laboratory examination. At no station has the water supply been the cause of disease.

Sewage disposal plants.—Most medical officers in charge of the stations in this area have not shown a proper conception of the principles on which these plants operate and have not kept themselves advised as to the efficiency of the plants by laboratory analysis. The desirability of this has been called to their attention and the examinations are now in process.

Ninth Corps Area.—During the calendar year sanitary inspections were made of all stations within the limits of the corps area, including those attached for inspection purposes only.

Inspection.—Reports in detail of these inspections have been submitted to the corps area commander and all defects noted have been brought to the attention of the responsible officers and correction directed by instructions from these headquarters. These inspections served a valuable purpose, for not only do they permit detection and correction of strictly sanitary defects, but they enable the sanitary inspector to give much needed instruction and advice to the inexperienced medical officers concerning matters of administration, supply, internal economy of hospitals, etc. It may be noted that at all stations the instruction of enlisted men in the duties of a sanitary soldier had not received proper attention; at many posts the washing of dishes and mess kits had not received proper attention; at others the proper fitting of shoes had been overlooked; and in a great many instances it was found that there was no record of examination of typhoid, paratyphoid, or dysentery bacilli. The foregoing matters are all covered by War Department instructions, but frequent inspections appear to be necessary to secure their enforcement.

WATER SUPPLY.

Second Corps Area.—Camp Dix, N. J.—The water supply is obtained from Rancocas Creek, at New Lisbon, N. J., about 12 miles from the camp. A Wallace and Tiernan chlorinator is part of the water purification equipment. A menacing condition regarding this

plant was reported recently. The wooden and earthen retaining wall between the building and the creek allows the water to penetrate it to a slight extent. This seepage may become dangerous during high water, for if any large amount of water overflowed and flooded the station the boilers might explode. A concrete wall should be erected if this camp is to be retained. The wooden intake for the water extending from the creek to the pumps is in a decaying condition and should be replaced by a concrete structure. The water is examined weekly in the laboratory and is potable, though the color is light brown, due to roots of fir trees along the watershed.

Fort DuPont, Del.—The water supply is derived from surface and artesian wells. As it comes from the faucets is quite unsatisfactory for drinking, washing, or laundering purposes, due to a heavy sediment of rust from old pipes and to the silt. Many of the families on the post purchase water for drinking and cooking. The water was found contaminated, and in December, 1919, a chlorinating apparatus was installed; since that time it has been uniformly free from bacillus coli.

Madison Barracks, N. Y.—The water used at this post was found to be unfit for drinking purposes unless treated or boiled. An order was issued to boil all water used for drinking purposes, which was done until a chlorinating apparatus was recently installed at the pumping station. Considerable difficulty was experienced in adjusting and maintaining the adjustment of this apparatus.

Fort Niagara, N. Y.—The water is chlorinated as it contains colon bacilli. The drinking water is distilled at the pumping station and delivered to the companies and families in a sanitary water wagon. Funds were allotted for the construction of a filtration plant, on June 23, 1920. The post quartermaster has made several requests to have the work started, but with no results.

Post of San Juan, P. R.—The water supply is deficient in quantity and poor in quality. The quantity depends upon the rainfall. There is no real dry season in Porto Rico, but in the months of March, April, and May there is a comparative drought. In April, May, and June, 1920, this drought became so prolonged as to become a sanitary menace to the city of San Juan, with its rapidly increasing population, and a source of considerable annoyance to this post. The water which could only be obtained during a part of the day (frequently for less than one hour), was muddy and heavily contaminated with organic materials.

The post of San Juan is situated at the extreme end of the city water main, and on high ground. It consequently suffers more acutely than any other portion of the municipality, for, during this period of water shortage, the lower part of the city drew practically all of the water from the system. The city authorities have neglected to provide the post with direct connections. If the condition recurs the installation of a force pump near sea level will be recommended.

Monthly examinations of the water are made. The quality of it is poor. Colon bacilli were present in samples examined in February, April, and November. The entire situation is deserving of serious consideration.

Third Corps Area.—Camp A. A. Humphreys, Va.—The water supply is from Accotink Creek. The entire watershed is under cultivation and subject to contamination. A very efficient sand filtration

plant is in operation and with sufficient dosage of chlorine, the bacterial count is usually low and gas producers infrequently found. Examination of water is made daily at the plant and specimens are sent weekly to the Army Medical School for examination.

Fort Myer, Va.—The filtration and chlorination plant at Rosslyn, Va., is not adequate to meet the needs of the post. The water was unfit to drink in January, September, October, November, and December, necessitating the boiling of it for drinking purposes. Improvements in the method of chlorination are promised by the construction division, Quartermaster General's Office.

Langley Field, Va.—The water supply at this station, which was previously reported as bacteriologically satisfactory, was later found potable. The Big Bethel water plant consists of a basin formed of a ravine buttressed by a dam and fed by springs. A filtration and chlorinating plant are in operation, but the process is faulty and does not render the effluent safe. The Government owns the plant, but does not own the watershed which has several habitations upon it. After a rain the number of colonies from the raw water are too numerous to be counted, and normally the count after filtration and chlorination is in the neighborhood of 600 with no differentiation into type. The corps area surgeon is of the opinion that the effluent of the plant is not potable and that the surgeon of Langley Field has been misled by the reports made by the plant chemist. Until the question of the potability is definitely settled all water for drinking purposes from this source has been ordered boiled. The command has apparently escaped water-borne diseases only through the immunity granted by inoculation.

MOSQUITO CONTROL.

Second Corps Area. Camp Dix, N. J.—Mosquito-control work has been carried on extensively during the past year. There are 14 streams running through the camp area and 6 of them are surrounded by marshland. During the early part of the year the ditching of this marshland was undertaken. This work was practically completed in the summer, and in the future only a small force will be necessary to maintain the ditches in working condition.

Fort Du Pont, Del.—At the west end of the reservation there is a low area of approximately 2 acres which is constantly under about 2 feet of water, affording a favorable opportunity for the breeding of mosquitoes. It has been recommended previously that this low area be filled in, but nothing has been done. If this could be done, the control of the mosquito situation would be less difficult.

As the town of Delaware City is very close to this post the sanitary situation at that place, which is poor, is of much concern to this command. Mass meetings, posters, and photography have been employed in a campaign to arouse and instruct the population that the defects may be corrected, but so far very little has been accomplished.

Camp Upton, N. Y.—The greatest problem has been, and will continue to be, the mosquito. Fortunately, however, the anopheles is missing, none ever having been found so far as is known in the camp or the vicinity. The chief offender is the salt-marsh variety (largely *Adis contore*). During the mosquito season they appear in

great numbers, at times in "droves," coming from their breeding places in the salt marshes in the neighborhood of the camp. An enormous amount of ditching and draining was done during the year, under the direction of the camp sanitary inspector, and squads were continuously at work oiling pools and swamps. There is no doubt that this accomplished a great deal of good, although there was a large number of mosquitoes throughout the season.

Third Corps Area. Fort Monroe, Va.—The sanitation of this post has been excellent. The upper end of the reservation leaves much to be desired in the way of drainage. This, however, can not be remedied without the outlay of a considerable sum of money, which is not available. Mosquito breeding in this area is controlled by the liberal use of oil on all ponds.

Camp Eustis, Va.—Much antimosquito work has been done, and if it is continued this camp should in the future have a fairly low rate of malaria. A considerable expenditure will be necessary each year for progressive antimosquito work, and also for screening, as there will always be near-by breeding places of anophelinæ off the reservation. The corps area surgeon states that: "The sanitation of the area has been satisfactory with the exception of the antimosquito measures necessary to free the terrain of Langley Field, Eustis, and the Balloon School at Lee Hall of the breeding places. These entail constant labor through the entire year."

The sum of money ($10,000) allotted to this area by the former Eastern Department for the third and fourth quarters of the fiscal year may with rigid economy be sufficient to meet the requirements with a reduced force at work, but the extent of territory to be covered argues for a large force to complete the work in a brief period with a small maintenance force thereafter. This is much better than a small force employed all the year, whose labor can do little more than keep pace with the regenerating vegetation with no time to attack new problems except in a desultory fashion. The stations of Monroe, Langley Field, Eustis, and Lee Hall on account of their environment require special consideration if the health of the troops is to be protected.

By drainage and oiling, breeding on the reservations can be prevented, but with myriads of insects breeding in the environments and being carried by wind, nothing short of proper screening will afford complete protection.

The headquarters post of Fort Howard is situated upon a peninsula jutting into the Patapsco River at its mouth and surrounded by salt marshes which afford excellent breeding and feeding grounds for the irritating salt-water mosquitoes. Since drainage is impossible and the oiling of the arms of the bay is out of the question, the sole protection of the command depends on screening.

Seventh Corps Area.—Five cases of tertian infection appeared at Fort Omaha, all incurred in men recently coming from malarial districts; 12 cases occurred at Camp Funston; and 92 cases at Camp Pike. Of these 76 infections were shown by their history to have been contracted while the men were away from the camp. Troops at Pike have protection from malaria only while actually at camp, and when absent in the vicinity they are constantly exposed. The antimosquito measures in the camp are considered effective, but do not protect beyond the limits of the camp. Out of 44 mosquito

specimens sent to the curator (of the Army Medical Museum) for examination, none were reported as infected.

AMERICAN FORCES IN GERMANY.

The Medical Department of the American Forces in Germany has been made up as follows:

(A) Office of the surgeon, American Forces in Germany.
(B) Office of the attending surgeon.
(C) Medical supply depot.
(D) Medical administration of civil affairs.
(E) Station hospital, Coblenz.
(F) Convalescent hospital, Coblenz.
(G) Station hospital, Antwerp.
(H) Provisional sanitary train.
(I) American Polish relief expedition.
(J) Certain inactive units, carried on paper at the station hospital, Coblenz.
(K) Dental service.
(L) Veterinary service.

The surgeon had under his control an average number of 98.1 medical officers, 18.67 dental officers, 7 veterinary officers, 1.92 sanitary and medical administrative corps officers, 73.4 members of the Army Nurse Corps, and 1,013.5 enlisted men. Frequent changes in personnel have necessitated a large number of transfers within the year. The number of Medical Department officers and men has been barely sufficient to cover all medical needs adequately, leaving a very small fraction for sickness, leaves of absence, and detached service.

At the present time 31 stations within the area are provided with medical attendance. Thirty-six infirmaries and 43 prophylactic stations are maintained.

SANITATION.

Water Supply.—The water supply in occupied towns throughout the area has been regularly examined. In the smaller villages it was necessary to chlorinate the water in Lyster bags, but in the larger towns with the exception of Coblenz, it was found potable. The water supply for Coblenz is obtained from five shallow wells, the water coming into them from the Rhine by seepage and it has gas-forming bacilli regularly. Consequently it was found necessary to chlorinate the supply at the source. Two Wallace-Tiernan chlorinating appliances are adequate for the purpose. During the early part of January the Rhine overflowed and flooded all the pumps, putting them entirely out of commission. The engineers established a water point for the command on the banks of the Mosel. The water was chlorinated there and was rechlorinated in Lyster bags by the troops. This water point was continued for three days, by which time the river had receded, and enough pumps had been put in commission to supply a limited amount of water. During the period of the flood no water-borne disease developed among the troops.

The water supply is adequate everywhere for lavatories and baths. At some outlying stations bath water is heated in improvised boilers over outdoor fires. Most of the troops have shower baths.

Kitchens and mess halls.—All kitchens and mess halls have been screened, but in some instances it has not been satisfactorily done. In the Second Brigade area the troops are stationed in towns formerly occupied by the Third Division, and in which mess halls and kitchens had been erected for their use. These were constructed of green lumber, which subsequently warped, leaving large cracks throughout the building, which renders protection against flies very difficult.

Laundry.—One laundry is operated by the quartermaster, which while it is of insufficient capacity to meet the needs of the entire command, still does a large amount of work of a high quality. In addition to this one, the station hospital has a small laundry within its compound, where a portion of its work is done.

Disposal of wastes.—Throughout the American area of occupation water closets are available in all barracks and in most billets. The plumbing fixtures are usually crude and of archaic pattern, but they serve their purpose adequately.

A large dump for the deposit of inorganic matter is maintained for the use of all troops stationed in Coblenz. Government property is salvaged, fires are burning continuously, and it is kept in an orderly state.

Kitchen garbage and manure are sold to German civilians, who remove it promptly.

Insects.—There are only a few flies, mosquitoes, and bedbugs, and these do not constitute a serious sanitary danger. Lice and the itch mite are common, the latter being responsible for numerous cases of scabies.

HEALTH OF THE COMMAND.

The general health of the command has been excellent, although contagious diseases have been frequently introduced by recruits from the United States, and some are constantly present among the civilian population. The endemicity of diphtheria, scarlet fever, and measles in the civil population has been a very important factor in causing at times a higher incidence of these diseases in the American Forces in Germany than in the Army as a whole. The highest incidence for communicable diseases occurred during the month of January. This was due to the influenza epidemic which reached its peak during this month. The general health of the command was much better during the latter half of the year. This is probably largely due to the elimination of the undesirables in large numbers, during the early months of 1920, by transfer of officers and men to the United States.

Scarlet fever.—A total of 30 cases of scarlet fever occurred during the year. The disease was present at all times except during August, September, and October. The endemicity of scarlet fever in the civil population undoubtedly accounts for its continued prevalence in the command.

Mumps.—One hundred and ninety-nine cases of mumps developed during the year. The heaviest incidence rate was in May and June. These cases were scattered throughout the various units of the command.

Malaria.—Twenty-one cases of malaria occurred. All of these developed in soldiers who gave histories of previous attacks in the United States or in the tropics. There is no malaria among the civil population.

Tuberculosis.—Fifty-seven cases of tuberculosis were diagnosed during the year. Of these four died and the remainder were transferred to the United States for further observation and treatment. Influenza had no apparent influence upon recurrences of tuberculosis.

Scabies.—Scabies has been very prevalent, and approximately 2 per cent of the command is infected. All severe cases are treated in hospital and their clothing and bedding are sterilized by steam under pressure.

Vincent's angina.—This condition, sometimes called "trench mouth" has been responsible for numerous admissions to hospital. This disease has attacked throats, gums, and genitals. Though much prostration is noted in some cases, none have resulted fatally. However, a large amount of physical inefficiency has resulted from it.

OFFICE OF THE ATTENDING SURGEON.

Location.—The attending surgeon's office is centrally and conveniently located. The rooms used for the office number eleven.

This office cares for the officers and enlisted men on duty at headquarters, American Forces in Germany, and their families; the members of the American, British, French, and Belgian sections of the Interallied Rhineland High Commission; welfare workers (Y. M. C. A., Y. W. C. A., and Salvation Army); and civilian employees of these headquarters.

The greater part of the medical work in connection with this office pertains to a treatment of diseases of the upper respiratory tract, which are very prevalent in this locality.

MEDICAL SUPPLY DEPOT.

Location.—At the beginning of the year medical supplies were stored in three different sections of Coblenz. In February, in a readjustment of storage space for all the supply service, that of the medical supply depot was concentrated in the Proviant Magazin, a stone building used by the German Army as a commissary warehouse. The total floor space is 46,512 square feet.

Warehousing.—As a result of a hurried, forced shipment of supplies for the medical supply depot, Trier, and of the changes of location in Coblenz, no satisfactory arrangement of supplies could be made until February. There was much used material included in the stock, many of the boxes being repacked cases, much of which had to be salvaged. The obviously unfit material was sorted, the few serviceable supplies removed, and the balance turned over to the salvage officer for disposition. The separation of stock into classes and into the proper warehousing required most of the time for the first six months. Since orderly shipment into the depot had not been possible this meant repeated rearrangement of stock within a crowded warehouse.

Stock.—The remaining stock is composed in large part of supplies from the American Expeditionary Forces and the Third Army, though some has been received from the United States. The stock at present is well segregated and access is possible to every item. Inventories based on the markings on the boxes are now possible and

should become more and more accurate. However, it is impracticable to open and verify the contents of all boxes in the depot. This means that variations are being constantly found between the amounts on stock record cards and the actual amount on hand. This situation will continue until all repacks are used and adjustment is made from time to time by physical inventory. Repacked boxes are used as far as is possible. Eventually this will reduce the stock to original cases.

Procurement.—On June 28th a cable was sent to the United States requesting discontinuance of shipments of medical supplies except for certain sera and electrical dental equipment.

The present stock is excessive in certain articles, but from time to time shortages are discovered in some commonly used supplies and requisitions to the States are limited in these shortages. It is anticipated that comparatively few and small requisitions will be required in the near future.

Certain articles have been procured in Europe to meet needs or because they were only obtainable there. Silver nitrate and silver-salvarsan are examples. Small amounts of nonstandard supplies have been brought to meet special needs. Arrangements have been made whereby the probable requirements of the American Forces in Germany for biological products can be obtained from the Pasteur Institute.

Requisitions.—It has been possible to supply most of the demands made upon the depot. A few items have been due-listed during the year and supplied when received. At present there are no due-lists. It is believed that no important item has been refused. During the year 1,119 requisitions have been filled.

This depot has also frequently been able to fill requisitions for purposes other than medical, and this has been done whenever possible. In all such cases the stock on hand was more than the probable needs of the Medical Department.

Policies.—In July, 1920, the station hospital was directed to carry in reserve a three months' supply of the essential articles of medical supplies. This action was taken to insure the continued operation of that hospital, should the stock of the depot be lost through fire.

Efforts have been made to have the depot considered not only a source of supplies but also the center from which information concerning methods of caring for these supplies and the keeping of the records thereof should be spread, from which every assistance by example or instruction should be rendered and from which trained men should be sent out, if necessary, to demonstrate the method of keeping records and of handling supplies.

Personnel.—In the beginning the personnel of the depot was almost entirely untrained and without previous depot experience, which made errors inevitable, but there has been a gradual improvement with increased experience and by elimination, and the present personnel is satisfactory.

Because of the comparative cheapness of German labor, all manual labor has been done by German civilian employees. The enlisted personnel has been selected with a view to use as clerks, statisticians, storekeepers, and checkers. Under this system only men with some educational qualifications are of value.

A gradual reduction in enlisted personnel and civilian employees has taken place. The Germans have been reduced from 54 to 16 and the present military personnel is 2 officers and 23 enlisted men.

From the stock now on hand at the depot, the following field medical equipment can be supplied, except in minor particulars:

(*a*) A full division of infantry at war strength.
(*b*) A medical reserve unit (Par. 891, Manual for the Medical Department).
(*c*) An evacuation hospital.
(*d*) An Army park (American Expeditionary Forces unit).

MEDICAL ADMINISTRATION OF CIVIL AFFAIRS.

The duties of this office are primarily to control the sanitary conditions of the civil population in the American occupied territory of the County Coblenz so that nothing may happen which could become detrimental to the military forces in the American occupied area.

Specifically these duties are:

(*a*) Inspections of prisons (Karmeliterstrasse prison and annex; military police jail and annex; jails at Neuwied, Andernach, and Mayen).

(*b*) Inspections of hospitals; (St. Joseph's Hospital, Andernach; Niedermendig Hospital; Burger Hospital, Coblenz; and Bendorf Hospital for women with venereal disease [see special report]).

(*c*) Inspections of bathing establishments (three in Coblenz, one in Andernach, and one in Mayen).

(*d*) Inspections of barber shops, cafes, hotels, theaters, and cinemas.

(*e*) Weekly reports of contagious diseases in all boroughs.

(*f*) Monthly reports of deaths in all boroughs.

(*g*) Monthly reports of births, both legitimate and illegitimate. Those known to be American illegitimate are reported separately.

(*h*) Reports on food are received weekly.

STATION HOSPITAL, COBLENZ.

During the year which ended December 31, 1920, the station hospital, American Forces in Germany, was the only institution in the American area for the hospitalization of the acutely sick and injured, not only of the American Forces, but also of the quite large number of American and allied civilians temporarily residing in the portion of Germany occupied by the United States troops. The sick from various organizations scattered throughout the area are collected daily and transported by ambulance to this hospital. This assures a proper segregation of contagious diseases and assumes the best modern diagnostic methods and treatment by specialists. The mean strength of command of the American Forces in Germany for the year was 15,219. The number of American and allied civilians, including the wives and families of officers and enlisted men, members of the various welfare organizations operating in the area, and members of the Rhineland High Commission, is approximately 2,000.

The work of the hospital has been very comprehensive, embracing cases of all the ordinary varieties found in a military hospital, in

addition to many gynecological, obstetrical, and pediatric cases admitted from the allied civil population of the area.

During the year there were admitted to the hospital 12,080 patients. On January 1, 1920, there were 1,356 cases in the station hospital and convalescent hospital. One hundred and thirteen deaths occurred in the hospital during the current year, representing a mortality rate per 1,000 admissions of 9.35. Two hundred and ninety-six soldiers were transferred to the United States for separation from the service or for further observation and treatment. Eleven thousand, six hundred and fifty-nine were returned to their organizations for duty, or, in the cases of civilians, discharged from the hospital. Five hundred and fifty patients remained in the station hospital or in the convalescent hospital December 31, 1920.

Of the 12,080 admissions, 10,620 were for disease and 1,460 for injury. Venereal infections gave the highest rate, being responsible for the admission of 3,158 soldiers, or practically one-third of all cases of disease. Influenza ranked second, the actual number, 799, representing 6.6 per cent of the admissions. Pneumonia (including both broncho and lobar) caused 237 admissions, 2 per cent of the total. There were 203 cases of mumps, 118 of measles, 78 of diphtheria, 54 of scarlet fever, and 27 of chickenpox.

Surgical operations in the hospital, both major and minor, numbered 787, or approximately 1 for every 11 admissions. Of the former there were 661, with tonsillectomy predominating. One hundred and forty-five complete operations were performed for hypertrophic tonsils, local anesthesia being used in the majority of cases. Appendicitis stood next as a single cause for major surgical operation, with 70 appendectomies or drainage of abscesses. Sixty-nine hernias were repaired. A total of 65 fractures required operation, 30 of which were from gunshot wounds. Of the 464 minor operations over a third were for peritonsillar abscess. Forty-six babies were born in the hospital during the period.

With a total of 1,356 patients in the hospital on January 1, the "peak of the load" occurred in the first week of the year, not only of patients in hospital but also of admissions. Four hundred and thirty-seven were admitted that week, 163 of which were for influenza. From that date weekly admissions decreased with the decrease in influenza, though the rate continued comparatively high for this disease until spring.

In all the diagnostic work the bacteriologic and roentgenologic laboratories have played an important part. Blood for Wasserman test is taken from every soldier patient immediately upon admission. In addition, the numerous dark-field examinations for spirochaetae in suspicious lesions, the repeated examination of blood in the outpatient department, and the examination of smears of all urethral and prostatic discharges demand efficient and rapid technical accomplishment in the bacteriological laboratory.

STATION HOSPITAL, ANTWERP.

At first the sick from the command on duty at the base port of Antwerp were treated in a Belgian military hospital. This arrangement proved unsatisfactory and the establishment of a small port hospital was recommended. After considerable delay, due to the

difficulty of obtaining suitable buildings, this hospital was opened in April, 1920, at No. 129 Rue d'Argile, Antwerp. It is a well-equipped hospital of 60-bed capacity, with facilities for the care of all types of cases. Those of a chronic nature requiring protracted observation and treatment and complicated surgical cases are transferred to the station hospital, Coblenz. There have been no epidemics in the command at the base port of Antwerp. The average number of admissions per month was 25, the average number cases transferred to station hospital, Coblenz, per month, 2.

PROVISIONAL SANITARY TRAIN.

This organization comprises Ambulance Company No. 6, Field Hospital No. 6, and Field Hospital No. 8, all motorized. The organization was stationed at Mayen, 30 kilometers from Coblenz, as a part of the Second Brigade, until November, when it was transferred to Neuwied, 20 kilometers from Coblenz, where it became an independent command under the direct control of Headquarters, American Forces in Germany.

The training schedule has been that prescribed in the Manual for the Medical Department for similar organizations, with the exception that instruction has been given in Infantry foot drill. All enlisted men were qualified in first aid and minor surgery, personal and camp hygiene, anatomy, and sanitation. Since the arrival of the train at Neuwied it has been used as a medical educational center for the training of Medical Department recruits in the duties of the sanitary soldier in the field.

AMERICAN POLISH RELIEF EXPEDITION.

Plan of campaign.—The general scope of the work of the expedition was: Equipment of hospital, distribution of American sanitary supplies, operation of bathing and delousing columns; maintenance of motor and steam sterilizer repair bases, and general instruction of Polish personnel. Medical and sanitary advisors were placed at strategic points within Poland and upon its eastern frontier, where a sanitary cordon was created. By this means the introduction of new cases of typhus fever with the influx of infected refugees from Russia, Ukrania, and Lithuania was in a measure prevented.

Personnel.—The mean daily strength of the command for the year was 100. The total cost to the United States Government for the year was $105,601. It is a noteworthy fact that no claims for damage to civilians, property, or State were incurred. The health of the command has been excellent. Only one death occurred from typhus fever, that of a medical officer of the Regular Army, Lieut. Col. Register. One soldier died of pneumonia and one from wounds incurred as a result of explosion of a steam sterilizer.

New phases of work.—Early in the year, a crisis in the Polish cabinet created the new office of typhus dictator, with whom the commanding officer of the expedition was closely associated. This led to liaison with the ministry of railways, the quarantine and refugee section, and the general staff of the Polish Army. At the request of the quarantine and refugee section trained medical officers

were furnished as advisors at quarantine stations of the eastern and southern sanitary cordon.

At the request of the general staff, assistance was given in combating the serious outbreak of typhus and other epidemic diseases in prison and internment camps. Later, upon the request of the American Minister to Poland, a special department was operated for the delousing and quarantine of those members of Haller's army returning to the United States on Army transports. Twelve thousand Polish-Americans were quarantined and returned to the United States by this department.

General situation.—Polish authorities, both civil and military, are most appreciative of America's help as given through the activities of this expedition. The problem of typhus fever, however, is growing larger and more menacing, due to stress of war and the great influx of refugees from Russia. This disease must be combated as an economic problem, which is one that demands an enormous outlay of money and material, with the gradual elevation of the education and sanitation of the masses. Up to the present time the Government of Poland has not been ready or able to undertake a nation-wide campaign for the eradication of typhus fever.

During the first eight months of 1920, 150,000 cases of typhus fever were reported. This does not include large districts of Poland that were occupied by the invading Bolshevik army and from which no reports were received for some time.

PHILIPPINE DEPARTMENT.

The troops were stationed at 11 posts and 4 subposts as follows:

POSTS.

Sternberg General Hospital, Manila.
Camp Eldridge, Laguna.
Camp John Hay, Mountain Province.
Camp Stotsenberg, Pampanga.
Camp Nichols, Rizal.
Cuartel de Espana, Manila.
Fort Santiago, Manila.
Fort William McKinley, Rizal.
Pettit Barracks, Mindanao.
China Expedition, Tientsin, China.
Defenses of Manila and Subic Bays, Fort Mills, Corregidor Island, headquarters and main hospital.

SUBPOSTS.

Fort Wint, Grande Island, Subic Bay.
Fort Frank, Carabao, Manila Bay.
Fort Hughes, Caballo Island, Manila Bay.
Fort Drum, El Fraile Island, Manila Bay.

HEALTH OF THE COMMAND.

The admission rate per 1,000 for 1920 was higher than in 1919, which is attributed to three facts: (1) In 1919 this department was garrisoned by Philippine troops (with the exception of Coast Artillery and Ninth Cavalry), whose venereal incidence is much less than for white troops, as is also true of the general admission rate. (2) In February, March, and April, 1920, The Siberian Expedition arrived in the Philippines (Twenty-seventh and Thirty-first Infantry) with over 800 sick, many of the enlisted men being replacements with the admission rate of unseasoned troops. (3) An epidemic of dengue, 2,248 cases, occurred in 1920 against 396 in 1919, due to the new susceptible material. Tientsin, China, presents the highest

admission rate of any post in the department and the highest venereal rate.

There were 109 discharges for disability, for the Philippine Scouts, of which 74 were for tuberculosis. Under General Orders No. 41, Philippine Department, 1916, these discharges for disability were recommended by a board of two medical officers at the man's station. The degree of disability was estimated by the board, at 100 per cent for tuberculosis. Under Circular 41, War Department, 1920, a Filipino discharged for tuberculosis, with total disability, received under the War Risk Insurance Bureau, from $80 to $125 gold, per month, which is wealth to them considering the standard of living of the Filipinos. This order has been changed and all cases of Philippine Scouts recommended for certificate of disability are sent to the Sternberg General Hospital, Manila, for the action of a board. Since only a few of these cases really had a total disability, this change of method has resulted in a great saving to the Government, allowing at the same time a competence to the Filipino, but not wealth.

The highest malarial rate (129.85) was at Camp Stotsenberg.

Venereal diseases remain the most important sanitary problem. Venereal prophylaxis as now practiced, notwithstanding the decreased rate due to it, has not solved the problem. The Tientsin garrison had over 40 per cent of venereals during 1920.

Leprosy.—One case, a Scout soldier, occurred at Fort Mills; the case was subsequently discharged on certificate of disability at Sternberg General Hospital, Manila, and turned over to the city health authorities.

Beriberi.—There was 11 cases reported during the year, all Philippine Scouts, 5 from Fort Mills and 6 from Fort William McKinley.

INSTRUCTION.

Courses of instruction have been given recruits at Field Hospital No. 4 and Ambulance Company No. 4, to inculcate the principles of discipline and some idea of field work, and on completion of courses the men were distributed to posts. Four men are undergoing instruction as X-ray technicians at the Sternberg General Hospital and will complete the course in March and be assigned to this work at the stations where most needed. During the year 11 enlisted men have been undergoing instructions as laboratory technicians.

HEALTH OF STATIONS.

Camp Stotsenberg.—The principal causes of admission were malarial fever, injuries, venereal disease, tuberculosis, bronchitis, and gastritis.

Quarters.—The quarters provided for officers of the Ninth Cavalry are temporary wooden structures and are totally inadequate and unsuitable. Due to their rapid deterioration it is impossible to maintain them in a proper state of repair or render them fly and mosquito proof. The barracks and mess halls of the Ninth Cavalry, with the exception of the machine gun and supply troops, are of the same nature. The same holds true for the barracks and mess halls of the First Philippine Field Artillery with the exception of A, B, and C batteries, which are satisfactory in construction.

The enlisted men's and officers' clubs are not screened, although repeated efforts have been made by the commanding officer to have this done. The above conditions contribute largely to the incidence of malarial infection at this post. The present barrio buildings are overcrowded, also unscreened, and a source of malarial infection.

The Air Service and a portion of the Artillery garrison have a modern sewage system draining into septic tanks which is satisfactory. The rest of the post is provided with a dry earth disposal system for excreta and a system of open drains for waste water. These are maintained in as sanitary condition as possible.

Malaria.—The malarial rate for 1920 will be slightly higher than previous year, probably due to a more prolonged rainy season.

Tuberculosis.—There has been no epidemic at the post during the calendar year. General health of command has been good. Thirty-six Scout soldiers were discharged on certificate of disability to date for tuberculosis. As the incidence of pulmonary tuberculosis among Filipinos is high, it is suggested that all candidates for original enlistment in the Philippine Scouts be carefully examined by a specialist, if possible, for incipient pulmonary tuberculosis.

Fort William McKinley. Influenza.—There were a few cases, not epidemic, throughout the year. Several cases of broncho-pneumonia which occurred in Philippine troops were of the type that usually follows influenza, which may be described as a migratory type where the areas of consolidation develop successively.

Dengue.—This disease has been mildly epidemic, but not so prevalent in Manila. It is still present.

Fort Mills.—The prevalent diseases during the calendar year have been the venereal group, dengue, and entamoebic dysentery, the comparative incidence being in the order named.

The sanitary defects of this post center primarily around the water shortage and its nonpotability in the raw state.

Recommendations have been made in the monthly sanitary reports to hasten the installation of the new salt-water system at Fort Mills. It is believed that this additional supply will in large measure relieve the water situation, since only 15 per cent of the supply is obtained at the present time by barge from Sisiman, Luzon. Insistence upon the boiling of all water for drinking purposes, the interdiction of the eating of green vegetables without preliminary scalding, and an educational campaign, including lectures and the showing of cinematograph slides, are some of the steps taken to correct the manifest sanitary defects at this station.

ADMINISTRATION OF THE DENTAL CORPS.

Establishment of new dental offices.—During the year base dental equipment was installed at four additional stations in the department and dental officers permanently assigned at each for duty. Formerly at three of the posts—Camp John Hay, Camp Eldridge, and Pettit Barracks—dental officers were ordered temporarily for short periods only. This intermittent service proved inadequate, especially at the posts some distance from Manila, the nearest point available where Army dental attention could be received. The fourth office was

established at the Cuartel de Espana in the city of Manila. The troops at this station had been receiving treatment at the Sternberg General Hospital but the distance to the dental clinic consumed considerable time and interfered with their duties.

There are now no posts in the department without permanent dental service, with the exception of Camp Nichols. As this post has only a small command and is in close proximity to Manila, the few dental patients there may receive treatment at the Sternberg General Hospital.

Rate of dental diseases affecting the different classes of troops.—The table below shows the prevalence of dental diseases among the three different classes of troops, white, colored, and Filipino, for the period from July, 1918, to December, 1920. The figures are compiled from the dental survey record.

	White.			Colored.		Filipino.		
	First survey.	Second. survey.	Third survey.	First survey.	Second. survey.	First survey.	Second. survey.	Third survey.
Number of soldiers examined	2,279	537	266	1,628	1,616	8,640	3,986	851
Number treated and their cases completed	1,142	372	158	1,081	665	4,236	2,426	177
Percentages of those in need of treatment, each survey	50.1	60.3	59.4	66.0	41.2	49.0	60.9	20.8
Average per cent each class of troops	59.6			53.6		43.6		

The average percentage of dental diseases in each class, 59.6 per cent white, 63.6 per cent colored, and 43.6 per cent Filipino, would indicate that there are among the white troops 6 per cent more dental cases than among the colored and 16 per cent more than among the native.

The dental surveys were not made of the same men the first, second, and third time. The examinations were made by companies and although each company may have been surveyed more than once the personnel was changing constantly.

HAWAIIAN DEPARTMENT.

MORBIDITY AND MORTALITY.

The health of the troops in the Hawaiian Department during 1920 was good. If we exclude venereal diseases, imported infections, accidental injuries, and especially physical disabilities existing prior to enlistment, the sick rate was almost negligible. This satisfactory showing was due to: (1) The favorable climate conditions existent on Oahu; (2) freedom from those infections that at times result in high morbidity and mortality in the United States and its other tropical possessions; and (3) careful sanitary supervision by medical officers.

Alcoholism.—Disability from alcoholism has been rare in spite of the fact that a native liquor "okolehao" can be purchased by those who are willing to pay for it and take the chances on drinking it. That there has been so little drunkenness and disability therefrom is greatly to the credit of the enlisted men and speaks well for the good common sense of the average young recruit.

Control of infectious diseases on transports.—To reduce as far as possible in the future the danger of infections on transports, similar to the influenza epidemic which occurred on the transport *Madawaska* in January, 1920, the department surgeon recommends as follows:

(1) Reduction of overcrowding on transports in so far as the exigencies of the service will allow, and keeping the men on deck whenever the weather permits and at nights as well as during the day.

(2) Removal from sailing lists and retention at embarkation posts of all enlisted men who have any rise of temperature, regardless of the assumed cause of such rise, and of all men who have any first symptoms of beginning infection. These precautions are especially important in the cases of younger recruits from rural districts.

To combat infections and to properly care for a large number of serious cases it is essential that all crowded transports have sufficient trained medical and nursing personnel. In this case there was ample personnel among the passengers and as a rule there are, in addition to the ship's assignment, medical officers and nurses on board as passengers, and their services are available. In cases, however, where there is but one medical officer on board and there are no trained nurses, an additional medical officer and two nurses should be assigned to duty for the voyage. The voyages on the Pacific are long, it is impossible to foresee what will develop, and if there is but one medical officer on duty and he becomes disabled or if serious infection appears and there is entire lack of trained nurses the results may be disastrous. If, therefore, the reserve personnel to meet emergencies among the passengers is not on board it should be specially detailed for duty on the voyage.

HOSPITALS.

Two hospitals treat the sick and wounded in the department, the Tripler General Hospital and the station hospital, Schofield Barracks. All posts, except Schofield Barracks, transfer all hospital cases to the Tripler General Hospital. All certificate of disability cases in the department are examined and reported on by a board convened at the Tripler General Hospital. Those who appear to be permanently disabled or disqualified are transferred for final action to the Letterman General Hospital.

Tripler General Hospital.—This hospital has a capacity of 200, which is capable of expansion to 400 in an emergency. At the present time its capacity is ample for all needs. It is the only military hospital that has suitable accommodations for women and children and has proven of the greatest benefit to members of families of officers, enlisted men, and Government employees.

The character of surgical and medical work at the hospital during the year has been exceptionally high. Diagnoses after painstaking and intelligent examinations have been promptly and accurately made and have been followed by gratifying results from medical and surgical treatment. The cooperation between the different services has been excellent and it is a great pleasure to report the unusually good professional work of the medical officers. There is one handicap to many of the officers on duty here, which makes the best administration to the hospital difficult. This is the lack of quarters for officers. Some have been unable to rent houses nearer than 4 or 5 miles. For the best interests of the hospital and of the officers there should be suitable quarters in the vicinity of the hospital. If the project for

a new hospital at Schofield Barracks is approved and an appropriation made for its construction the quarter question will be settled, but if the hospital at Schofield Barracks is not to be built, quarters for officers should be built at or near the Tripler General Hospital.

Station Hospital, Schofield Barracks.—This hospital can accommodate 200 patients. It could not well be expanded without constructing new wards. This would not be advisable, as the buildings are in a rather poor state of repair and are situated too far away from the new post. The hospital has done excellent work during the year and with the increase of the garrison the work of the hospital has practically doubled since the first of the year. The detail of six nurses for duty has increased its efficiency and as at Tripler the results obtained by the medical officers have been very gratifying.

Hospitalization of patients, other posts.—At all other posts, except Fort Shafter and the arsenal, for which the Tripler General Hospital acts as station hospital, there is a well-equipped dispensary where sick call is held, routine examinations made, and where cases not requiring hospital care are treated. These dispensaries have all been administered satisfactorily by the post surgeons.

SANITARY CONDITIONS OF POSTS.

Schofield Barracks.—Sanitary conditions have been very satisfactory. The surgeon and his assistants have kept careful supervision over the conditions of the post, and there have been no epidemics and very little sickness. The most interesting sanitary feature of Schofield Barracks has been its water supply. This has been ample and wil be ample for all present or expected needs. The quality of the water has varied greatly, that at the hospital and other places in the old post, which comes from the Waianae watershed west of the post, has been good, while that at the new post, which is from the Koolau watershed east of the post, has as a rule been suspicious, and has frequently been reported as not potable, colon bacilli being present. This water has been not only chlorinated, but also boiled. A defect in the chlorinating system was recently located by the surgeon, Schofield Barracks. This defect, resulting in the loss of chlorine through a by-path, was remedied and the water is now of a good quality and potable.

Fort Ruger.—Sanitary conditions have been very good. Recently a new water supply from Palolo Valley was added to the old supply, but since many colon bacilli were present in the new supply, it was cut off and the post now depends on the old supply which is good.

Fort Kamehameha and Luke Field.—Sanitary conditions have been very satisfactory and there have been no defects to report. Kamehameha has increased in size, and for the best administration of the Medical Department it should have in addition to the dispensary: (1) Barracks to accommodate 20 enlisted men, Medical Department; (2) dental dispensary, consisting of operating room, office, laboratory, storeroom, waiting room, and bedroom for two enlisted men.

Fort Shafter and Arsenal.—Sanitary conditions have been very good. The presence of mosquitoes is sometimes an annoyance, but is not a danger. When the project of draining adjoining government land is accomplished the number of mosquitoes should be decreased.

SUPPLIES.

There was delay in receiving supplies in some instances early in the year. This condition has been improving and since the procurement of medical supplies has been placed in the hands of the Medical Department such delays will probably become less frequent.

The supply of glasses to correct visual defects has been recently reported as unsatisfactory on account of what seems to be unnecessary delay and frequent mistakes in providing incorrect lenses.

Ambulance Company No. 9 is not yet fully equipped with ambulances. Of eight new ambulances ordered shipped from Camp Holabird, only the chassis were received. Bodies of the older ambulances were placed on these chassis and while the makeshift was a great improvement they are not as good as new ambulances would be. There are enough ambulances to perform transport service, but not enough to fully equip Ambulance Co. No. 9.

X-ray plates have recently been reported by Tripler General Hospital as being defective, while the films were satisfactory.

PANAMA CANAL DEPARTMENT.

Conditions and affairs.—During the calendar year 1920, there was little out of the ordinary to note as influencing the health conditions of the department. The department has been enlarged by the addition of two reservations, one at Fort Davis, garrisoned by the Fourteenth Infantry and one at Fort Clayton by the Thirty-third Infantry. Besides these there was the reoccupation of the camp at Empire and Camp Gaillard by a regiment of Porto Rican Infantry and a squadron of cavalry.

The posts at Empire and Gaillard are out of range of easy transportation to the terminal hospitals, Ancon and Colon, since they are situated on the west side of the canal where there is no direct train service. For this reason the old canal administration building at the camp at Empire, has been converted into a 60-bed hospital, and equipped for general service, with only a dispensary service for the old post at Camp Gaillard, Canal Zone. The garrison totals about 2,000.

HEALTH OF THE COMMAND.

Mosquito control.—The Army sanitary inspector reports that the following work was done by the Medical Department from January 1, 1920, to December 31, 1920, as part of the permanent work under the allotment for "Drains and fills":

Station.	Dirt drains.	Concrete drains.	Tile (6-inch).	Tile (10-inch).	Fills.
	Feet.	*Feet.*	*Feet.*	*Feet.*	*Cubic yards.*
Corozal	2,295	1,902	2,095	139	665
Fort Clayton	135		428		200
Panama secondary	1,200				
Fort Davis	2,000				1,000
Fort Sherman	11,223		2,791	575	1,350
France Field	19,734				
Fort Randolph	25,436				
Total	62,025	1,902	5,314	714	3,215

In addition to putting in the drains and making the fills, the Medical Department manufactured at their plant at Ancon, Canal Zone, 42,229 linear feet of concrete drains at $0.22 a foot; 2,050 linear feet of 6-inch drains at $0.07 a foot. and 372 linear feet of 8-inch tile drains at $0.12 a foot. The cost was less than half the price paid for them in the open market. This permanent work, such as putting in concrete and tile drains and making fills, greatly reduces the cost of maintenance.

During the year a most important piece of sanitary engineering was done upon the recommendation of the Medical Department of the Army and the Health Department of the Canal Zone. The concrete dam at the mouth of the Cardenas River, which had blocked up the fresh water and allowed anopheles mosquitoes to breed, was tunneled under and a concrete flume installed, allowing the fresh water to flow out at low tide and flooding the river with salt water at high tide. This river runs very close to Fort Clayton.

Mosquito experiments were carried on at night before the occupancy of the new posts at Fort Clayton and Fort Davis to determine the prevalence and flights of mosquitoes. At each post trained mosquito catchers and larvæ men are stationed, their duty being to catch the adult mosquito in quarters and to hunt out and destroy their breeding places.

Throughout the wet season grass is cut in low swampy areas and along streams and ditches, so that the oiling may be more effective in killing mosquito larvæ.

Alcoholism and drug addiction.—The increase in the rate of venereal diseases was marked by a proportionate increase in the number of cases of chronic alcoholism and drug addicts. The drugs used are cocaine, morphine, and cannabis indica. The cannabis indica is obtained and smoked in the form of the Indian hemp plant. Such conditions must be expected where troops are serving in the immediate neighborhood of two such cities as are the terminal cities, Panama City and Colon.

It is the opinion of this office that the successful solution of this problem can only be expected when the terminal cities of Colon and Panama City are placed under the police and sanitary control of the United States, and the same laws are applied that effect the prohibition of liquor and the suppression of prostitution in the United States.

Personnel.—The department has had and still has a deficiency of commissioned and enlisted personnel. The various stations are below their proper quota in all ranks. This fact, together with the increased amount of work occasioned by Army reorganization, has imposed an unusual amount of work on individuals. The Dental Service has suffered especially in this respect.

GENERAL HOSPITALS.

WALTER REED GENERAL HOSPITAL.

GENERAL ADMINISTRATION.

This hospital serves as a general hospital for the Army at large, and as a station hospital for troops stationed within the District of Columbia, the latter class of cases being admitted by informal transfer. It is situated near the northern boundary of the District of Columbia, being about 6 miles from the War Department and about three-fourths of a mile from the Baltimore & Ohio railroad stations at Takoma Park, D. C., and Silver Spring, Md.

Members of the military establishment are ordered to this institution from all sections of the country, not only for care and treatment, but also for recommendation as to definite disposition. Such cases require expert professional treatment with very careful study that the proper and final disposition of each one may be determined and executed. These entail professional, administrative, and clerical work far in excess of that ordinarily required in the routine handling of the military personnel in hospitals. There has been a marked increase in the number of admissions of the beneficiaries of the Bureau of War Risk Insurance, Public Health Service, Federal Board for Vocational Education, and Employees' Compensation Commission.

The capacity of the hospital is 1,500 beds with an expansion capacity of 2,000, most of which are located in buildings of temporary frame or semipermanent tile and stucco construction.

During the year 5,407 patients were admitted to hospital. Of this number 2,631 were returned to duty, 1,592 were discharged on certificate of diasbility, 110 were transferred to other hospitals, and 72 died. On December 21, 1920, there were remaining in hospital overseas cases as follows: Officers, 58; nurses, 1; and enlisted men, 356. Six of the officers were of the Regular Army, and 52 of the emergency: and 145 of the enlisted men were of the Regular Army, and 211 of the emergency.

The following is a numerical report of admissions and dispositions with classification of patients remaining December 31, 1920:

TABLE 60.—*Numerical report of admissions and dispositions, Walter Reed Hospital, 1920.*

	Remaining in hospital Dec. 31, 1919.	Admitted from command.	Admitted by transfer.	Otherwise admitted.	Total to be accounted for.	Returned to duty.	Died.	Discharged for disability.	Deserted.	Discharged by expiration of term of service.	Transferred to other hospitals.	Otherwise disposed of.	Remaining in hospital.	Remaining in quarters.	Total remaining Jan. 1, 1921.	Days lost in hospital.	Days lost in quarters.
Officers and enlisted men on the active list of the Army	1,607	1,020	2,413	730	5,770	2,387	43	1,592	41	6	104	477	1,109	11	1,120	122,883	7,364
Army Nurse Corps	24	110	17	7	158	128											
Bureau of War Risk Insurance											6	7	16	1	17	6,833	447
All others	4			142	146		3					111	32	0	32	4,721	
	70	145	23	800	1,038	116	26					812	84	0	84	22,228	160
Total	1,705	1,275	2,453	1,679	7,112	2,631	72	1,592	41	6	110	1,407	1,241	12	1,253	456,665	7,971

TABLE 61.—*Classification of patients remaining in the Walter Reed Hospital Dec. 31, 1920.*

SURGICAL.	
1. General surgical	71
2. Amputations	35
3. Dental	2
4. Eye, ear, nose, and throat	90
5. Empyema	20
6. Facio-maxillary	38
7. Genito-urinary	78
8. Neuro-surgical	127
9. Orthopedic	257
10. Septic	156
11. Obstretrics	9
Total	883
MEDICAL.	
1. General	186
2. Infectious	17
3. Neuro-psychiatric	167
Total	370
Grand total	1,253

The majority of the cases transferred to this hospital in 1920 were cases remaining under treatment in other general hospitals which were closed during the year. The discharge of all emergency men (officers excepted) on June 30, 1921, is contemplated, with their readmission on July 1, 1921, as beneficiaries of the Bureau of War Risk Insurance.

HOSPITAL ORGANIZATION.

A. Department of administration.
   1. The executive officer.
   2. Correspondence and records.
   3. Inspection.
   4. Detachment administration.
   5. Police and fire protection.

B. Department of service and supply.
   1. Service and supply.
   2. Constructing and utilities service.
   3. Mess service.
   4. Motor transport service.
   5. Telegraph and telephone service.
   6. Post exchange.
   7. Recruiting service.
   8. Morale, education, and recreation service.

C. Department of professional services.
   1. Surgical service.
   2. Medical service.

D. Reconstruction and education departments.
   1. Ward handicrafts.
   2. Curative shopwork.
   3. Educational and vocational training.

E. Physio-therapy department.
   1. Measurement and record station.
   2. Hydrotherapy.
   3. Electrotherapy.
   4. Massage.
   5. Medical gymnastics.

F. Nursing department.
   1. Army Nurse Corps.
   2. Army School of Nursing.

PHYSICAL EXAMINATIONS.

During 1920 the following number of physical examinations were made:

Annual physical examinations for officer patients	228
Annual physical examinations for duty officers	126
Physical examination of officers, nurses, Army field clerks, and enlisted men appearing before administrative boards	655
Physical examinations with respect to certificate of disability, discharges for cases other than for disability, and various reports of miscellaneous examinations	2,780

PERSONNEL.

Commissioned.—The following number of officers were on duty at this hospital December 31, 1920:

Medical Corps	70
Dental Corps	10
Medical Administrative Corps	10
Sanitary Corps	2
Quartermaster Corps	2
Chaplains	2
Finance Department	1

During the year all emergency officers were discharged with the exception of cases pending the result of examination for commission in the Regular Army.

Enlisted men.—The strength of the Medical Department detachment, on December 31, 1920, with the gains and losses was as follows:

Strength of detachment Dec. 31, 1920	549
Gains during the year:	
1. By transfer	421
2. By enlistment	34
3. By reenlistment	44
4. From desertion	60
5. Recruits from depot	233
Losses during the year:	
1. Discharged by expiration of term of service	546
2. Discharged dishonorably, result of general court-martial	2
3. Discharged for other causes	47
4. Transferred	68
5. Deserted	106
6. Discharged, certificate of disability	95
7. Furloughed to the Army Reserve	64
8. Died	7
9. Transferred to patients' detachment	3

During the year many of the one-year enlistment periods terminated, as shown by the number of discharges per expiration of term of service. There was a number of discharges on account of disability, for which the causes existed prior to entrance into the service, and which had been noted and waived when the men were enlisted.

Quartermaster detachment.—The strength of detachment, Quartermaster Corps, December 31, 1920, was 63.

Army Nurse Corps.—At the close of the year 1919, 192 nurses were attached to the hospital. During the year 1920, 142 Reserve Army nurses were discharged. Fourteen Regular Army nurses joined by admission to the service and 220 were received by transfer. Owing to the great increase in the number of student nurses stationed at the hospital, it was deemed advisable to reduce the number of graduate nurses. Consequently, 147 were transferred to

other stations, leaving a total number of 137 members of the Army Nurse Corps in the hospital December 31, 1920.

Student nurses.—From an enrollment of 112 students in December, 1919, the number increased to 406 by the addition of students who were transferred here from other hospitals when they were closed. Active affiliations were maintained with civilian hospitals in New York City, Boston, Waverly, Philadelphia, and Washington, D. C. In October, 1920, a class of 13 students entered and qualified for the course in the Army School of Nursing. This number formed the nucleus of the graduating class of 1923.

SURGICAL SERVICE.

General surgery.—The work of the surgical service continued to be heavy in spite of the large number of patients discharged. Two thousand four hundred and thirty-nine operations on the entire surgical service were performed with a total of 321 cases on the section of general surgery, of which the following classification was made:

Appendectomies	94
Herniotomies	78
Other abdominal	56
Anus, rectum, and hemorrhoids	34
Thyroidectomies	10
Miscellaneous	49

From May to the 1st of September a clinical conference for one hour was held, each Thursday, at which time a section chief, appointed the preceding week, gave a demonstration of the cases on his section. From October to May a course in military surgery for the students at the Army Medical School was given. This consisted of a weekly lecture and quiz, and the assignment of the officers in sections to the various subsections of the surgical service for practical clinical instruction in the wards and in the operating room. Lectures were also given to the students of the Army School of Nursing by various members of the surgical staff.

Septic surgery.—The section of septic surgery treated during the year the residue of chronic suppurative osteomyelitis cases resulting from gunshot wounds of the bones received during the war. A few cases were discharged directly from this service, but most of them were transferred to the various other services to correct associated conditions before discharge.

Empyema section.—This section dealt mainly with cases of chronic empyema, the greater number of which were the residue of the so-called empyema epidemic in 1918. These cases were received by transfer from various hospitals and camps in the United States, France, and Germany, and they represent the failures of the hitherto accepted methods of treatment of chronic empyema.

Maxillo facial service.—The number of cases on the maxillo facial service has steadily decreased during the year, a comparatively small number of cases remaining December 31, 1920.

Neuro-surgical service.—This section was occupied chiefly with remaining cases of war wounds, approximately 80 per cent of the patients having received gunshot wounds involving the peripheral nerves. Cases resulting from gunshot wounds of the head and spine were not so numerous as in previous years, since most of them had

been disposed of, having reached the maximum degree of recovery. A few cases of recent fracture of the skull were treated.

Eye, ear, nose, and throat section.—The eye, ear, nose, and throat section is divided into two large subsections: (*a*) Eye clinic and (*b*) ear, nose, and throat clinic. The clinical work of a routine nature, ward work, work with cases referred by other sections for diagnosis, consultations, and search for evidence of focal infections are for the most part done in the morning, with the operative work in the afternoon. This clinic furnished practical work to students of the Army Medical School and to a number of officers designated to receive special instructions and to specialize in the eye, ear, nose, and throat work. The total number of treatments given during the year was as follows:

Eye clinic	20,733
Ear, nose, and throat	18,854

The total number of operations for the year was:

Eye clinic	172
Ear, nose, and throat	909

Orthopedic section.—This section had under treatment at all times during the year 1920 an average of from 250 to 300 cases, including acute fractures, fractures with nonunion and loss of substance, following infected war wounds and injuries, tuberculosis tendons and joints, injurious and end results with deformities from various types of arthritidies. A large number of the chronic cases were received by transfer from other general hospitals, as they closed, and from the American Forces in Germany. The operations done during the year were as follows:

Bone grafts	34
Open reductions	19
Joint resections	4
Arthrodesis of shoulder	3
Osteotomies	2
All others	70
Total	132

Amputation section.—On January 1, 1921, 338 amputations cases were remaining in hospital, 72 of which were admitted during the year. Twenty-six primary amputations were done in 1920. Three hundred and seventy-six patients who had attained the maximum degree of improvement were discharged after they had been fitted and instructed in the use of their prothesis.

Urology (dermatology included).—The work of this section increased materially during the year 1920. The following examinations were made:

Consultations	2,176
Cystograms	7
Cystoscopic examinations	205
Dilatations	28
Endoscopic examinations	40
Fulgurations	1
Kidney function tests	18
Pelvic lavage	13
Proctoscopic examinations	63
Pyelograms	29
Ureterograms	5

A total of 149 operations were performed in this department.

Obstetrics and gynaecology.—On the obstetrical section there were admitted 135 patients in 1920, with 112 births, and with no maternal deaths.

Dental department.—On December 31, 1920, there were 9 dental officers, 17 enlisted men, 2 hygienists, and 1 stenographer on duty in this department.

A summary of work done during the year is as follows: Officers and enlisted men treated, 7,225; sittings, 23,726; all others treated, 1,681; sittings, 4,813; total treated, 8,906; total sittings, 28,539.

Lectures and demonstrations.—Two lectures were given before the weekly conference of duty officers at the hospital, when maxillo facial cases for whom surgical prosthetic restorations had been supplied were presented, and types of splints used and methods of intermaxillary wiring were demonstrated. A complete and comprehensive maxillo facial exhibition was prepared and shipped to Boston for exhibition at the National Dental Association.

Prosthetic department.—The chief function of the prosthetic department during 1920 was the construction of artficial restorations of all kinds for patients who had suffered injuries of the maxillo facial region. These injuries necessitated the construction of seven casts aluminum appliances for the eye, four for the ear, two for the nose, and seven obturators for patients with palatal perforations. In addition to those appliances, 303 artificial dentures were made, 31 fixed or removable bridges inserted, and 110 appliances of other kinds provided.

Dental oral surgery.—This department had charge of: (*a*) The designing, insertion, care, and adjustment of all splints, both intra and extra oral which were used in the maxillo facial cases requiring splinting; (*b*) the collection and filing of X-ray photographs and models of all cases for reference purposes; and (*c*) the care of all dental surgical cases including extractions, the removal of impactions, the care of cases of maxillary sinusitis of dental origin, and the surgical elimination of focal infection requested by other services of the hospital. The majority of maxillo facial cases treated by the dental service, were cases of gunshot wounds from the war that required bone grafts or extensive plastic operations. The following is a brief résumé:

Patients treated	1,428
Sittings, officers and enlisted men	6,351
All others	952

Operative department.—This department averaged 5 dental officers, with approximately 40 sittings per day.

Dental X-ray department.—Six thousand seven hundred and eighty-seven radiograms were taken during the year, the majority of which were made on requests for consultation from wards.

Oral hygiene department.—The dental hygienists have shown that this is a necessary department in the Army hospitals. Three thousand eight hundred and seventy-eight prophylactic and pyorrhœa treatments were given, and 96 cases of Vincent's angina treated during the year.

X-ray department.—There was a decrease in the amount of work done in this department on the war casualties, with an increase in the character of work done in civilian hospitals. Twelve thousand

patients were examined with the use of approximately 30,000 plates and films. Four machines are maintained in the main laboratory, two being for diagnostic work only, one for fluoroscopic examinations, and the fourth for treatment only. A complete file of all plates and films taken with all of the interpretations made are kept for ready reference at all times.

Orthopedic appliance shop.—During 1920 the following work was done:

ARTIFICIAL LIMBS.

New legs furnished	200
Refittings	245
Repairs	856
Exchanges	10
Leather casts	841
New arms furnished	25
Refittings	15
Repairs	10
Exchanges	1
Gloves, pairs	25

LEATHER DEPARTMENT.

Brace coverings	576
Cuffs	475
Webbing straps	667
Repairs	516
Casts lined	156

COBBLING DEPARTMENT.

Rubber heels, pairs	1,021
Orthopedic alterations	669

A large amount of work was also done in the machine shop and plaster room.

Anesthesia.—The total number of general anesthetics given on the surgical service, exclusive of obstetrical service, was 1,305. Of this number 123 were nitrous oxide-oxygen ether mixtures, 533 were nitrous oxide-oxygen ether sequences, and 649 were nitrous oxide-oxygen. Seven hundred and ninety-seven local anesthetics were also given.

MEDICAL SERVICE.

The general medical service is divided into the general medical service, neuro-psychiatric section, and the contagious disease section, receiving ward, and post surgeon.

An electrocardiograph was installed and made its first records April 26, 1920. Up to December 31, 1920, 388 tracings were made. Arrangements have been made for the installation of an apparatus for determinations of basal metabolism by the indirect method. The apparatus selected is the Tiscot gasometer and Russell-Sage modification of the Henderson-Haldane gas-analysis apparatus. The following cases of infectious diseases were treated: Two hundred and thirteen cases of acute influenza, epidemic type, with 4 deaths, due to bronchopneumonia, all of which occurred during the months of January, February, and March, 1920; 37 cases of acute lobar pneumonia, with 4 deaths; 16 cases of measles; 5 cases of German measles; 7 cases of scarlet fever; 10 cases of diphtheria; 3 cases of epidemic meningitis, with 1 death; 1 case of paratyphoid fever "B"; and 6 cases of epidemic encephalitis. Three of the latter cases occurred in officers, 1 in enlisted men, and 2 in civilians.

Neuro-psychiatric section.—The neuro-psychiatric section treated 621 cases. These cases are classified as follows:

Absent without leave, cases not completed	20
Cerebrospinal lues	23
Constitutional psychopathic states	80
Dementia praecos	175
Diseases due to alcoholic and drug addicts	16
Epilepsy	29
General paralysis of the insane	15
Manic depressive insanity	25
Mental deficiency	5
Nervous or mental diseases	27
Organic diseases of the central nervous system (nonleutic)	20
Psychoneumosis	186

Dispositions of patients during the year were made as follows:

Discharged on certificate of disability to own care (social recovery)	186
Transferred to War Risk Hospitals	117
Returned to duty, recovered	82
Died	6

LETTERMAN GENERAL HOSPITAL.

On January 1, 1920, there were 1,158 patients on sick report, and 4,988 were admitted during the year. One hundred and eight were transferred to other hospitals and 95 deaths occurred. Nine were for cases not on sick report. On December 31, 1920, there were remaining in hospital 677 patients. All of these figures include officers, enlisted men, and civilians. The greatest number of patients in the hospital on any one day was 1,266 on January 12, 1920.

The personnel on duty on January 1, 1920, consisted of 79 officers, 130 graduate nurses, and 60 student nurses; 456 enlisted men of the Medical Department, 117 of the Quartermaster Corps, 11 Motor Transport Corps, and 2 Signal Corps; and 225 civilian employees of the Medical Department and 55 of the Quartermaster Corps. There were on duty December 31, 1920, 44 officers, 58 graduate nurses, and 108 student nurses; 391 enlisted men of the Medical Department, 90 Quartermaster Corps, 2 Finance Department, and 2 Signal Corps; and 135 civilian employees of the Medical Department and 65 of the Quartermaster Corps.

MEDICAL SERVICE.

Personnel.—The personnel of the medical service during the past year has, in general, been adequate both in numbers and quality. The stabilization of service conditions has allowed greater permanency of personnel with consequent improvement in the quality of medical work performed.

Facilities.—The great expansion of the hospital under war conditions made necessary the erection of a large number of temporary wards in which the medical service was principally located, the permanent wards of the hospital having been allotted to the surgical service on account of their proximity to the operating rooms. With the diminution in number of surgical patients during the past year, the medical service has gradually taken over its former permanent wards on the east side of the hospital quadrangle and only two temporary wards are now in use. The return to the permanent wards has greatly improved the work of the service. The concentration of

patients permits the more satisfactory supervision of wards, and the proximity to diet kitchens, physiotherapy plants, X ray, and clinical laboratories, etc., has greatly facilitated the care and treatment of the patients. The isolation section is located in the permanent concrete ward which was built for the purpose and which is satisfactory in every respect. The psychiatric section is located in a large concrete ward which was also built for this work, and is satisfactory in most respects. Minor alterations are now in progress to improve the existing facilities of this ward.

Isolation section and epidemics.—The instructions outlined in Memorandum on Infectious Diseases, published by the Surgeon General's Office under date of January 1, 1918, are followed throughout the hospital. The cubicle system is in use with the masking of all attendants in cases requiring it, and with the careful handling of all secretions and excretions. Thermometers are properly disinfected, dishes sterilized by steam, and clothing and bed linen thoroughly disinfected. Pneumonia cases following measles are treated in a separate ward in the contagious-disease building. Other cases of pneumonia are treated in Ward 18, which is used solely for the treatment of pneumonia cases. This is a small, well-equipped ward and well adapted to the purpose.

Epidemic diseases.—The latter part of January, 1920, was marked by a return of epidemic influenza, coincident with the second great epidemic which swept over the country. The outbreak lasted approximately 30 days. It was apparently the same disease as the severe infection of 1918, but milder in type and with lessened mortality. The cases were carefully followed clinically and daily roentgenograms of the chest were taken with the bedside X-ray apparatus. This proved of great interest and value in these cases. In those cases which developed pneumonias the process could be detected at the outset and followed from day to day. Empyemas were diagnosed without delay and proper treatment instituted. A total of 129 cases of influenza were treated during this epidemic, with broncho-pneumonia as a complication in 25 cases. The bacteriological findings varied as in the former epidemic. The prevailing organisms were as follows:

Streptococcus hemolyticus	9
Streptococcus Viridan's	5
Micrococcus catarrhalis	2
B. Pfeifferi	1
Pneumococcus, Type I	0
Pneumococcus, Type II	2
Pneumococcus, Type III	0
Pneumococcus, Type IV	8

The other important infectious diseases prevalent during the past year were measles and mumps, but these exhibited only the seasonal increase during the winter months, were mild in type, and attended by only a few serious complications.

Psychological examinations.—The experience of the psychiatric section of this hospital during the past year has clearly shown the necessity of having a psychological rating on all recruits accepted for Army service and also the desirability of requiring all recruits to pass through recruit depots where they are under observation for a cer-

tain period before final acceptance. This would eliminate many mental deficients and unstable individuals who promptly break under the strain of military service.

Reconstruction work.—The reconstruction service of the hospital has given efficient cooperation to the medical service during the past year. This work has proven especially valuable in the neuro-psychiatric section and the curative workshop has established itself as a definite advance in the treatment of cases of psychoneurosis and psychosis.

NEURO-PSYCHIATRIC SERVICE.

During the year 1920 the neuro-psychiatric service has been very active. The gradual decline in the number of admissions that was to be expected after the close of the war was not so apparent. In fact, the number of admissions has been quite large and the bed capacity of this service has been severely taxed. This can be explained by the fact that the intensive recruiting gathered in a class, which included a large number of neuro-psychiatric cases. This is borne out by the fact that a large proportion of the cases discharged for neuro-psychiatric conditions gave definite histories of the existence of these conditions prior to enlistment. The transfer of a large number of recruits to the Hawaiian and Philippine departments naturally brought also an increase in the number of patients returned to this hospital for neuro-psychiatric conditions.

SURGICAL SERVICE.

General surgery.—The number of operations during the past year totals 1,623, performed on 1,420 patients, almost exactly one-half the number of operations and patients as listed in the year preceding. The number of deaths following operations were 21. The number of operations include major and minor ones, which were hospitalized and officially recorded, but do not include dressings of accident wounds and trivial operations on outpatients not admitted to hospital.

The marked decrease in number of operations as compared with the numbers of the preceding year is due to the majority of war-wounded cases having already been disposed of, or having been operated, and requiring no further operative treatment. Some remaining war-wounded cases, chiefly nerve lesions and osteomyelitic, in which multiple operations had to be done, were, however, operated during the first half of the year, but comparatively few cases of war injuries still remain in hospital at the end of the year. It is gratifying to record that a very good percentage of empyema cases have been returned to duty as fully cured, with little or no remaining disability. The 1920 surgical cases received approached the normal of peace-time number.

Clinics are held three times a week, for the examination, diagnosis, determination of treatment, operative procedure, and disposition of general surgical and orthopedic cases.

Orthopedic section.—The number of patients in the orthopedic section showed a marked decrease, only three wards being set aside at the end of the year for treatment of these cases, including the neuro-surgical. This reduction has been due largely to the discharge of overseas cases which had attained a maximum degree of improvement.

Numerous cases of flat and defective feet were received during the year, most of them in men who soon after enlistment had gone on sick report and had done practically no duty. Many of them had third-degree flat feet with marked pronation, and some had old malunited fractures, ankylosed joints, etc., with history of trouble before entering the service. The greater proportion of such cases had to be discharged on certificate of disability, after doing little or no real service for the Government.

Neuro-surgical section.—Only twenty operations were performed for nerve suture and neurolysis, the majority of these being the second or third operations for repair, in cases in which excision of the divided nerves to healthy nerve tissue had resulted in such extensive gaps that the nerve ends should not be approximated in the primary operation. All peripheral nerve lesions received prolonged and thorough treatment in the physio and electro therapeutic departments, with courses of muscle training, and in the main with very good results. At the end of the year there were very few nerve lesions remaining in hospital. None were, however, discharged until it was decided that maximum hospital improvement had been attained.

Ear, eye, nose, and throat section.—A general résumé of the work of this department may be noted as follows:

New patients treated in the clinic	6,120
Old patients treated in the clinic	6,152
Number of prescriptions for glasses given	821
Operations:	
Nasal (of which 95 were submucous resections)	116
Throat (of which 419 were tonsillectomies)	426
Ear (of which 12 were mastoidectomies)	22
Eye	26
Number of admissions to eye, ear, nose, and throat ward. (This number is exclusive of officers and civilian patients, of whom no accurate record is available)	748

Genito-urinary section.—Most of the gonorrheic infections were of the chronic and stubborn type, requiring the passage of sounds, deep instillations, and urethroscopy. For cases other than these the average time of stay in hospital for gonorrhoea patients was reduced to about five weeks. Some of the uncomplicated syphilitic patients are kept in hospital until they receive full course of salvarsan and mercury injections, which requires from 26 to 30 days. However, syphilitic patients from the neighboring posts are returned to duty after a course of salvarsan, and thereafter reporting at the hospital at proper intervals for further treatment.

X-ray section.—The new apparatus installed during the year includes a new interrupterless Campbell transformer, a Kelly-Koett tube stand No. 6, and a Kelly-Koett treatment stand.

Much bedside work has been done in the wards, for which the bedside unit, army type, has proved efficient, satisfactory, and most valuable.

Physio-therapy department.—The physio-therapy department is well equipped to perform this class of work efficiently. It is directed by a commissioned officer of the Medical Corps, who has had special training in this line. He prescribes all treatments to be administered to patients sent to this department from the wards and supervises the aides in carrying out such treatment. Any change in treatment is

prescribed by him and he is the judge of when maximum benefit has been attained in his department.

There are three wards set aside for this department, in which baking, massage, fomentations, muscle training, hydrotherapy and massage, and electrotherapy and massage are given. The gymnasium, which is an adjunct, is housed in one of the solaria.

The work in this department has shown a steady decrease in amount during the year, the number of treatments given in January, 1920, being 14,456, as compared with 7,088 during December. The number of aids on duty has been decreased by more than 50 per cent, so that the proportionate amount of work required of each has actually increased.

The efficiency of work done, especially in the hydro and electro therapy has been markedly increased.

Woman's ward.—There were 448 admissions to the woman's ward, of which 132 were medical, 165 surgical, and 151 eye, ear, nose, and throat cases. Of the surgical cases 107 were operative and the majority requiring multiple operations, principally gynecological.

Obstetrical service.—This work is carried on in a ward especially arranged for the purpose and well adapted to it. While rated at a capacity of nine, only six can be comfortably accommodated, one in each of two small rooms and four in the ward.

It was believed that after the return to prewar conditions and the reduction in the number of those eligible for admission, that these accommodations would be amply sufficient, but it frequently happens that overcrowding is necessary in order to take care of those applying for admission. The total number of confinements was 109.

EDUCATIONAL SERVICE.

The work of the educational service for 1920 reflected in extent fairly closely to hospital conditions, as shown in number and character of population. The hospital population decreased rather rapidly from 1,300 patients in hospital at the beginning of the year, until the lowest figure for the year, 540, was reached in July. Thereafter the population settled to a fairly stable level of approximately 650 patients for the remainder of the year. Roughly paralleling this decline in population, not only the enrollment but also percentage of enrollment declines. This was 85 per cent in January, highest for the year, and the lowest in April, 51 per cent. For the entire year an average by months of 65 per cent was maintained, as against a corresponding average of 71.5 per cent for 1919. There were various influences effective in lowering the percentage of enrollment, the most noticeable being the change in character of patient's disabilities. During the year 1920 the great majority of war wounded, attained a maximum degree of improvement and were discharged from the service. The patients who replaced them in the hospital were admitted largely for more minor disability, and their stay in the hospital was limited. During a considerable portion of the year these admissions, of post-hospital character, constituted a major portion of the population.

In order to meet this condition in the most practicable way possible, the educational service attempted to reorganize the subject matter for study into flexible, brief unit courses. In this way an attempt was made to offer a definite unit of training to any patient desiring it,

however short his stay in the hospital might be. These conditions also led to a noticeable tendency toward an increase amount of ward instruction, especially in general academic and commercial lines.

The changes in the conditions of service heretofore noted called not only for reorganization in subject matter of the various courses, but also for reorganization in staff duties, especially in view of the necessary reduction in forces paralleling the decrease in the hospital population. During 1920, the educational staff decreased from 113 to 37. With this decreased number, it appeared that no constructive purpose was being served by the division of the department into occupational bedside, academic, and vocational groups. Hence the three were merged under one supervisory head, resulting in greater efficiency.

FITZSIMONS GENERAL HOSPITAL.

SANITATION.

Roads, grounds, etc.—During the greater part of the year, road connections with the city of Denver were unsatisfactory. Efforts have been continued within the post to improve the roads. Several pieces of concrete road have been completed, while other roadways have been improved by means of cinders. It is planned to continue this work during the coming year, and it is hoped that eventually good concrete roads can be constructed for the entire post.

Sewage and disposal of waste.—Sewage was disposed of through a modern sewerage system emptying into filter beds. Garbage and kitchen refuse was burned and manure from the stables used for fertilizing. In spite, however, of these precautions, and of the extensive use of flytraps, flies were much more numerous during the summer months than they should have been.

Mosquitoes.—Mosquitoes are quite prevalent, as they will probably continue to be since lakes in the vicinity, as well as irrigation ditches, afford favorable breeding places. These are chiefly culex fatigans. Anopheles have never been found in the vicinity.

Water supply.—This is excellent in quality and ample for drinking, etc., but insufficient for lawns and gardens. Efforts are being made to augment the supply by local wells, which are being drilled.

Clothing.—This is satisfactory now, though during the early part of the year considerable difficulty was encountered in securing shoes of proper sizes.

Food supply and messing.—The quality of food supplies are entirely satisfactory and the messing facilities have been much improved. Diet kitchens have been installed in a number of the wards, and other installations are contemplated. In the general mess the cafeteria system has been adopted and it is thus possible to serve any number of patients with hot meals. Fruits and vegetables of all varieties can be obtained from the markets of Denver in almost unlimited amounts. The milk is excellent in quality and is supplied in sufficient quantity.

When Bulletin No. 40, W. D., 1920, authorizing the payment, on properly prepared voucher, by the local finance officer of mess accounts for beneficiaries of the War Risk Insurance Bureau, became operative, one of the greatest difficulties in operating the mess was overcome, since funds can be secured for the subsistence of these

patients promptly, and therefore the financial obligations of the hospital can be met without delay. The general financial condition of the mess is thereby much improved, which consequently enables the hospital to operate a more satisfactory one.

CONSTRUCTION.

During the year an extensive program of building and improvement was carried out at a cost of $553,298.63.

Construction work at an estimated cost of $750,000 is contemplated for the year 1921.

ENLISTED PERSONNEL.

During the greater part of the year, the enlisted personnel was insufficient. The discharge of one-year enlistment men, as well as of others, on account of dependents and minority, with the comparatively large number of desertions, kept the personnel below the required strength for the efficient management of the hospital.

The majority of the present personnel may be considered efficient, although owing to the extreme youth and lack of training, many of the men have not mastered their duties to the fullest extent. Quite a number were assigned to the medical department, due to their being unable physically or mentally to perform the duties in the "line."

Morale.—The morale improved considerably during the year, with the discharge of the emergency men. One of the great causes of discontent was the retaining of men in the service against their will. The arrival of a number of older men from the general hospital, at Fort Bayard, N. Mex., about the middle of the year, also had a tendency to stabilize the detachment and thus improve the morale.

The service club is being operated satisfactorily and does much to improve the morale of the men. The same moral and physical standards should be required for the Medical Department personnel as is required for recruits for the line, since it is not believed that a soldier in the line is required to make any greater physical exertion than the Medical Department men are, and certainly they are not required to perform duties requiring a higher degree of intelligence.

MEDICAL SERVICES.

The medical service is by far the largest of the professional services, and at this hospital includes also the X-ray section. On December 31, 1919, this service was well organized and was functioning satisfactorily, the hospital having been in existence a little over a year. Practically all of the ward surgeons were emergency officers, and the number was greater than it was possible to maintain at a later date, when these officers were discharged, and the number of officers of the Regular Army Medical Corps available to replace them was considerably curtailed.

In addition to such routine treatment of tuberculosis as rest, diet, fresh air, and symptomatic measures, special forms of treatment, such as artificial pneumothorax, heliotherapy, and graduated exercises, were employed in selected cases.

Heliotherapy.—On account of previous experience at Fort Bayard, N. Mex., with heliotherapy, where it was proven valuable in certain tuberculous conditions, the use of this measure was stressed during the summer months. A large number of cases of bone, joint, gland, and abdominal tuberculosis received this treatment, the exposures being carefully graduated, beginning with five minutes and increasing, as each case warranted it, five minutes each day until a maximum of one hour and a half to two hours' exposure was given daily.

Exercise.—Realizing the importance of graduated exercise as a part of the treatment of tuberculosis, in those cases that have improved to a certain point, a complete scheme of graduated exercise was worked out.

Professional qualifications of officers.—All of the officers on duty in the medical service have special qualifications for tuberculosis work, and in their assignment to the different wards their individual ability is given special consideration. During the year there were a great many changes, largely incident to the discharge of emergency officers and their replacement by regulars. Due to the relatively small number of regular officers available, there has been a decrease of about 30 per cent in the number of officers on duty in the medical service.

X-ray section.—The X-ray laboratory is located in the basement of the administration building. The equipment is complete and adequate for all types of radiographic examinations. Every case of tuberculosis admitted to the hospital has a chest examination by a roentgenologist, and such additional examinations as are indicated as required. During 1920, 5,908 patients were examined, of which number 4,583 were examinations of the lungs.

Physiotherapy section.—This department was not definitely established until in September, 1920, when one medical officer and four reconstruction aids were sent here upon the abandonment of Lovell General Hospital, Fort Sheridan, Ill., for the purpose of establishing and maintaining a physiotherapy department. Some little delay was experienced in securing and setting up the necessary apparatus, and the department was officially opened for the treatment of patients on October 4. This department has now one medical officer, three reconstruction aids, and one enlisted man, Medical Department.

The value of this type of treatment in selected cases is being more and more appreciated, and additional equipment must soon be provided. Especially is this true of the Alpine Lamp Unit, an additional one being now an imperative need.

SURGICAL SERVICE.

Owing to the fact that this hospital was established primarily for the treatment of pulmonary tuberculosis, but little ward space was provided for surgical cases, and during the summer of 1920 the surgical ward was entirely inadequate to properly care for the surgical patients. Clean cases were in the same wards with pus and infected cases, and many cases requiring surgical care and treatment received this treatment in medical wards, on account of insufficient room in the surgical ward. To remedy this, one of the infirmary wards was made available for use by the surgical service, thus making it possible to separate clean and pus cases, and to provide separate dressing

rooms. The results have justified this action, for there has been no case of wound infection in a single clean case, and cases other than tuberculous, sent in from the Public Health Service, can also be cared for. During one week 16 clean operations were performed on Bureau of War Risk Insurance patients. If this service continues to expand, an additional ward will be required.

The building previously known as nurses' isolation ward has been converted into a ward for the care of obstetrical cases, one large room being fitted up as a delivery room. The care of this class of patients has been very satisfactory. A portion of Ward F–4 is being used for female surgical cases. This is the only available space for the care of this class of patients, but it is inconveniently situated, owing to its distance from the operating room.

EAR, EYE, NOSE, AND THROAT DEPARTMENT.

This department is adequately equipped in every way, but two additional commissioned officers are needed. The amount of work required of this department is far in excess of that at other general hospitals, owing to the great number of cases with tuberculous involvement of the upper respiratory tract and the great number of routine examinations required.

DENTAL SERVICE.

During the past year the policy was inaugurated of making complete oral clinical examination of all patients immediately upon admission. These examinations are recorded on duplicate reports, one of which is retained by the dental service, while the other one is forwarded to the receiving ward to be filed with the patient's clinical record. In addition to this examination, a complete oral radiographic examination should be made of all patients on admission, for more foci of infections are found in tuberculous patients than in nontuberculous. Weekly examinations and instructions in the care of oral tissues should be given to all patients. However, this can not be done with the present personnel.

It is recommended that a dental chart accompany all patients on change of stations. For tuberculosis hospitals one dental surgeon should be assigned to each 350 personnel to be treated.

LABORATORY SERVICE.

Routine laboratory examinations are also made for all patients on admissions, and in addition to this one, such special examinations as are required. Weekly lectures are given by the chief of the laboratory service for the professional staff of the hospital, at which, in addition to tuberculosis, other interesting and important medical subjects are considered. These lectures are supplemented by photomicrographic demonstrations and presentations of gross preserved specimens.

EDUCATIONAL SERVICE.

There was a marked reduction in the educational and recreational personnel. Through this reduction the services of 4 commissioned officers, 4 head aides, 22 female and 3 male aides were lost, necessi-

tating the complete reorganization and retrenchment of the educational work, which was apparently done without any real loss in efficiency.

The proportion of patients who are being given educational work is higher at the present time than at the beginning of the year. This change was accomplished by discontinuing all official activities of aides and teachers, other than their work as instructors, whereas during the war a considerable portion of the efforts of the educational and recreational personnel was directed along morale work and entertainment.

The work of this department is carried on both in the wards and the school buildings. Bed patients are not required to take the ward work, for while a patient with a war wound may be kept in a better mental attitude by keeping his mind occupied with educational work, apparently the same beneficial effects can not be expected among tuberculous patients, except in selected cases. When a patient has become semiambulant, he is urged to take such educational work as his ward surgeon believes he is physically able to do, but when he becomes ambulant a definite amount of work is prescribed as a part of his treatment. While patients are encouraged to take such educational work as they desire, a very definite supervision is exercised, and they are in a measure directed into lines of work which their preliminary training and previous method of earning a living indicate they may be best fitted to carry on. A definite effort is made to frown upon the "play shop" work for men who are physically qualified for the heavier work, as it is considered decidedly unprofitable for a man physically strong enough for carpenter and machinery shop work to waste his time upon such employment as knitting. Academic, vocational, and commercial lines are features, and while the other lines of work are available, patients are encouraged to take those named, in preference.

This service also handles the educational recreational work for the command. The classes for the duty personnel are held at such hours as will enable the greater number to be excused from their regular duties.

The personnel of this department on December 31, 1920, consisted of 2 officers, 5 enlisted men, 20 female and 3 male aides, and 4 curative workshop instructors, which represents the minimum force that can give efficient service. With the contemplated increase in the hospital capacity, it is probable that there will have to be a slight increase in this department.

SUPPLIES.

Supplies received during the year were sufficient and generally satisfactory in quality.

Motor transportation equipment requires replacement. Since the organization of this hospital this branch has given the greatest trouble, and as a result of delays in replacing unserviceable parts the transportation has deteriorated to an alarming extent. While requisitions are now being satisfactorily filled the damage has already been done, and large replacements of this line of supplies are urgently needed.

Recent orders for separating medical from quartermaster supplies, it is believed, must result satisfactorily, as it was found impossible to impress on line supply officers the importance of scientific and technical supplies.

The chief defect in medical supplies has been the deterioration of rubber goods, which do not last well in this dry climate. It is also probable that much of this stock has been in storage for some time.

ANNUAL ADMISSIONS.

TABLE 62.—*Summary of admissions to Fitzsimons General Hospital for the year 1920.*

	Command.	Transfer.	Otherwise.	Total.	Tuberculous.	Nontuberculous.
Officers	18	160	276	464	426	28
Enlisted men	860	458	240	1,558	660	898
Nurses	50	37	16	103	44	59
Beneficiaries Soldier Home	.....	66	53	119	119	.....
Bureau of War Risk Insurance	.....	.....	920	920	840	80
Cadets, United States Military Academy	.....	4	.....	4	4	.....
Civilians, male	83	1	.....	84	4	80
Civilians, female	134	4	1	139	17	122
Army field clerks	.....	14	4	18	17	1
Reaides	38	1	.....	39	1	38
Technicians	1	.....	.....	1	.....	1
Dietitians	3	.....	.....	3	.....	3
Total	1,187	745	1,510	3,442	2,132	1,310

ARMY AND NAVY GENERAL HOSPITAL.

The total number of admissions during the calendar year 1920 was 921. They were distributed as follows:

Army and Navy (officers and enlisted men)	278	
Civilians (honorably discharged soldiers and sailors of the Army, Navy, and Marine Corps, and civilians)	643	
Total admissions		921
The average daily number treated in hospital was	90.5	
Remaining in hospital Jan. 1, 1920		144
Total to be accounted for		1,065

DISPOSITIONS.

Returned to duty	194	
Died	11	
Deserted	1	
Discharged on surgeon's certificate of disability	44	
Transferred to other hospitals	5	
Otherwise disposed of (civilians left hospitals, etc)	718	
Total dispositions		973
Remaining in hospital Dec. 31, 1920		92

STERNBERG GENERAL HOSPITAL.

This hospital, formerly known as the "Department Hospital, Manila, P. I.," was announced as the "Sternberg General Hospital, Manila, P. I." by G. O. No. 40, War Department, Washington, D. C., dated June 26, 1920, in honor of Brig. Gen. George Miller Sternberg, United States Army (born 1838, died 1915), eminent bacteriologist and sanitarian, who served as Surgeon General of the Army from 1893 to 1902, and founder of the Army Medical School.

This is the general hospital for the Philippine Department. It differs from the general hospitals in the United States in that it is

not directly under the command of the Surgeon General, but owing to its geographic location it is under the control of the department commander. It receives the more serious sick from all station hospitals in the islands, including those to be returned to the United States for further observation and treatment; receives and recommends all native enlisted men who are physically unfit for the military service for discharge on certificate of disability; and acts as a station hospital for all troops stationed in the city of Manila.

The hospital is located on the corner of Calle Arroceros and Calle Concepcion on a plot covering about 4 acres, adjoining the old medical supply depot. It originally consisted of 30, long one-story separate buildings of the old Spanish type, running out from a central court. A number of these have been reconstructed and consolidated from time to time, a second story being added with connecting porches. It now consists of 25 separate buildings, all of which are well screened, except such as are used for storerooms.

New construction during the past year.—A new operating pavilion was constructed in the central court. The upper floor is used as an operating and dressing room, physio-therapy department, and office of the chief of surgical service, and the lower floor for the X-ray department, receiving office, offices of the chief of the medical service and chief nurse, and examining room. Four of the old buildings have been reconstructed, a second story being added with connecting porches. All of the wards and offices have been repainted and a number of minor changes and repairs made as reconstruction of roads, new side walks, rebuilding of nurses' quarters, new floors in various buildings, etc. A ramp was also constructed leading to the second-story porches to facilitate the passage of food carts from the kitchen to the second-story wards.

New construction recommended.—The interests of the service requires more conveniently arranged and attractive accommodations for sick officers and women patients, including obstetrical patients. Also if a command of approximately the present strength is to be maintained in this department, building No. 7 should be remodeled by the construction of a second story similar to that for building No. 26, which occupies a corresponding location on the south of the main entrance. This change would add greatly to the symmetry and attractiveness of the hospital, and would also afford opportunity for the rearrangement of the present unsatisfactory officers' and women's wards. The hospital administration would also be greatly facilitated by the installation of a private exchange telephone service connecting the various wards, departments, and offices. There are seven trunk lines from the city system entering the hospital which could be reduced to three, thus effecting a considerable saving for the Government as well as increasing the efficiency of the present system.

Laboratory service.—The department laboratory, which performs this service for the hospital, is a separate and distinct organization and not under the command of the commanding officer of the hospital. In spite of the earnest and honest efforts on the part of this laboratory and of the hospital personnel to obtain the best results, it is believed that the laboratory service for the hospital will never be satisfactory until it is placed under the control of the commanding officer.

PERSONNEL.

Average number of medical officers on duty	12.12
Average number of dental officers on duty	2.58
Average number of Sanitary Corps on duty	.60
Average number of administrative officers on duty	.22
Average number of Nurse Corps on duty	34.57
Strength enlisted men Dec. 31, 1919	95
Strength enlisted men Dec. 31, 1920	188

TABLE 63.—*Movement of the sick for the calendar year 1920. Sternberg General Hospital.*

	Officers and enlisted men.	Philippine Scouts.	All others.[1]	Total.
ADMISSIONS.				
Command	376		15	391
Transfer	991	42	10	1,043
Otherwise	4,145	143	909	5,197
Remaining 1919	57	14	41	112
Total	5,569	199	975	6,743
DISPOSITIONS.				
Duty	4,843	139	19	5,001
Died	22	1	25	48
Discharged on certificate of disability	0	36	0	36
Deserted	0	1	0	1
Discharged on expiration of term of service	0	0	0	0
Transferred to Letterman General Hospital	511	0	6	517
Transferred to other hospitals	7	2	1	10
Otherwise disposed of	9	0	900	909
Remaining 1920	177	20	24	221
Total	5,569	199	975	6,743

[1] Includes Army nurses, retired enlisted men, and civilians.

TRIPLER GENERAL HOSPITAL.

For the report of this hospital, see Hawaiian Department report, page 197.

ARMY MEDICAL SCHOOL.

INSTRUCTION OF OFFICERS.

The twenty-fifth session began November 1, 1920, and ended May 26, 1921. Sixty-seven officers of the regular Medical Corps were ordered to the school for the course of instruction; three resigned before the completion of the course, and one failed to appear, his orders being revoked before the beginning of the session. Of the remaining 63 student officers who completed the course, 59 were found proficient in the course and were awarded certificates of graduation. Two of the four who were found not proficient were each sick in hospital for two months during the term of instruction. One officer of the medical corps of the Florida National Guard, one of the New York National Guard, and one of the Texas National Guard attended the course, were found proficient, and were awarded certificates of graduation. One officer of the Ohio National Guard also started the course, but withdrew before completion. An officer of the Medical Corps of the Cuban Army and two of the Peruvian Army attended the course, were found proficient, and were awarded certificates of graduation.

Upon the completion of this course, the officers of the regular Medical Corps of the class were ordered to the Medical Field Service School at Carlisle Barracks, Pa., for a six weeks' course of instruction.

The student officers who will compose the class of the twenty-sixth session of the school, which will commence on or about January 9, 1922, will have just completed a five months' course at the Medical Field Service School, at Carlisle Barracks, Pa.

GRADUATION EXERCISES.

Graduation exercises of the Army Medical School class of 1920–21 were held Thursday afternoon, May 26, 1921, in the auditorium of the New National Museum.

The diplomas were presented to the graduates by the Hon. John Wingate Weeks, Secretary of War. The invocation and benediction were pronounced by Chaplain Milton O. Beebe, United States Army. An excellent musical program was rendered by the orchestra of the United States Marine Band.

The Hoff memorial medal was presented to Maj. Albro L. Parsons, Medical Corps, United States Army, by the Surgeon General of the Army, Maj. Gen. Merritte W. Ireland. The Slee medal was presented to Capt. Philip P. Green, Medical Corps, United States Army, by Lieut. Col. Charles F. Craig, Medical Corps, United States Army. The Sternberg medal, which was presented for the first time, was presented to Capt. Virgil H. Cornell, Medical Corps, United States Army, by Brig. Gen. Walter D. McCaw, Assistant Surgeon General, United States Army, commandant of the school.

INSTRUCTION OF ENLISTED MEN.

Three classes of enlisted men were instructed during the year in bacteriology and laboratory technique and in chemical laboratory technique, the instruction being divided into two courses, the basic course and the advanced course.

In the basic course, the following subjects were taught: Weights and measures; preparation of stains; preparation of media; care of animals; blood counts; hemoglobin estimations; routine staining methods; recognition of the tubercle bacillus, diphtheria bacillus, and gonococcus, etc.; cleaning and sterilizing of laboratory glassware; technique of preparing blood and other smears; technique of collecting blood for blood cultures and the complement fixation tests; methods of securing and preparing pathological material for shipment to corps area and department laboratories; and other simple routine procedures.

A certain number of the enlisted men were selected to pursue the advanced course, which comprised instruction in the following branches: Training in the special laboratories of the school in cultural methods and recognition of the more important pathogenic bacteria; the recognition of the malaria plasmodia, other animal parasites, and ova of intestinal parasites; the technique of serology, including agglutination, precipitin, and complement fixation tests; and the technique of immunology with applied methods in the treatment or prophylaxis of disease.

The basic course in chemical laboratory technique consisted of the following: Elementary chemistry, properties of the common elements and their compounds, simple chemical technique, preparation and use of volumetric solutions, proper care of chemical laboratory glassware, chemical milk analysis, and routine chemical analysis of urine.

The advanced course in chemical laboratory technique comprised the following: Chemical analysis of water, technique of the common tests used in blood chemistry, methods of collecting blood for chemical analysis, detection of alkaloidal and metallic poisons, and quantitative urine analysis.

Forty enlisted men completed the basic courses as above outlined, 30 qualified as laboratory assistants, and 10 were permitted to take the advanced courses. These 10 completed the advanced course and qualified as expert laboratory technicians.

The course for X-ray technicians was amplified and made more practical. Three classes were given instruction during the year. Fifty-three enlisted men were enrolled in these classes, 8 of whom were returned to other duties as being unqualified to handle X-ray apparatus; 45 were graduated and assigned to stations. Of those completing the course, 22 received certificates of special proficiency.

On January 1, 1921, follow-up cards were sent to the commanding officers of the hospitals where graduates of the X-ray technicians course had been sent. It was gratifying to note the number of favorable replies received.

LABORATORY DIVISION.

The laboratory division of the Army Medical School, under the control of the director of laboratories, has the following functions:

1. Instruction of medical officers and enlisted men in laboratory methods.
2. Investigation of diseases with the object of better control.
3. Routine examination of specimens.
4. Examination of supplies and apparatus with a view to their adoption or rejection for the service.
5. Manufacture of prophylactic vaccines and other biological products.

The following laboratories comprise this division: Bacteriological, pathological, serological laboratory for the manufacture of typhoid vaccine, the same for pneumococcus vaccine, chemical, dental, and veterinary.

During the year 14 medical officers were on duty in these laboratories. A considerable amount of research work has been conducted, as well as investigations having to do with supplies and apparatus considered for adoption in the service.

Research work.—A considerable amount of research work has been conducted.

Pathological laboratory.—During the year this laboratory did the pathological work for the Army Medical School, Columbia Hospital of this city, and supplied sections for class work.

Serological laboratory.—Routine work in this laboratory embraces the performance of serological examinations, consisting chiefly of the complement fixation test for syphilis, gonorrhea, and tuberculosis; the

preparation of reagents for complement fixation work (amboceptor and antigens) for use in the school and in supplying other stations and laboratories; the preparation of human blood grouping serum for the determination of blood grouping prior to blood transfusion and for shipment to hospitals and laboratories; the performance of various clinical laboratory examinations, including dark field examination; blood counts; urinalysis; stool and sputum examinations; smears and colloidal gold tests of spinal fluids; and the administration of various vaccines, both prophylactic and therapeutic.

The following list of reagents have been shipped to various Army laboratories, and in some cases to civilians and hospitals where an emergency existed:

Antihuman amboceptor	sheets	246
Cholesterinized antigen for the Wasserman test	cubic centimeters	315
Tuberculosis antigen for tuberculosis complement fixation test	do	130
Antisheep amboceptor, liquid	do	22
Blood grouping sera for determining human blood groups:		
Group II	do	280
Group III	do	280

A total of 5,751 Wasserman tests were made, 107 specimens of spinal fluid tested, and 240 complement fixation tests for gonorrhoea were also made, in addition to 31 complement fixation tests for tuberculosis.

A large amount of special work consisting of the investigation of various problems connected with complement fixation reactions and in "protein sensitization" was accomplished.

Vaccine laboratories.—Vaccines which are used to any extent in the military service are all manufactured at the Army Medical School. Triple typhoid vaccine and pneumococcus vaccine comprise the great bulk of these. During the fiscal year ending June 30, 1921, the following amounts of vaccines were manufactured and supplied from the school:

Vaccine supplies:	Cubic centimeters.
Triple typhoid	1,609,363
Pneumococcus	170,365
Gonococcus	18,390
Staphylococcus	1,768
Staphylococcus-acne	3,869
Streptococcus	1,992
Staphylococcus-streptococcus	3,011
Plague	5,520
Pertussis	138

As in the past, the triple typhoid vaccine has been supplied to the Army, Navy, National Guard, Reserve Officer's Training Camps, Citizens' Military Training Camps, United States Public Health Service, Agriculture Departments, other Government departments, and to certain civilian institutions, where it was especially needed. The large amount of this vaccine which has been manufactured during the year at the school, totaled 2,255,800 cubic centimeters. It has been manufactured at a very small cost as compared to what it would have cost the Government had it been purchased in the open market. There has been a continual demand for the pneumococcus vaccine, and during the year 170,365 cubic centimeters of it has been supplied to the Army, Navy, and other organizations.

Chemical laboratory.—The work of the chemical laboratory also includes that of the food and nutrition laboratory. A very large

number of examinations have been made, comprising examinations of drugs, foods, beverages, blood, and water. Standards for the colorimetric determination of hydrogen ion concentrations have been prepared and distributed to the various army laboratories. These laboratories have also been supplied with chemical and reagent solutions not carried in stock or that are unusually difficult of preparation.

During the year there has been a great increase in the amount of work in the physiological chemical laboratory, this increase being largely made up of blood chemistry and basal metabolic rate determinations. Over 250 chemical examinations of the blood and 214 basal metabolic rate determinations have been made upon patients for the purpose from the attending surgeon's office, and Walter Reed General Hospital.

Dental laboratory.—The dental laboratory has been in operation since February, 1921. This is a new department and is devoted to the investigation and study of dental bacteriology and oral infections. It is organized in two sections: (1) An examination and operating office, (2) a bacteriological laboratory. Since dental bacteriology has received scant consideration in the past, the whole question is undeveloped. The available literature is not only limited in its scope, but full of inaccuracies and of opinions based upon insufficient evidence. The purpose of this laboratory is to examine dental and oral specimens and ascertain as far as possible the causes of local destructive conditions and their relation to systemic disturbances. It is intended to coordinate as far as possible clinical and bacteriological findings and to study the bacteriology of the mouth by means of the most modern methods.

Veterinary laboratory.—The veterinary laboratory, now located at the school, was formerly located in the buildings of the veterinary department of the University of Pennsylvania, Philadelphia, Pa., On April 15, 1920, this laboratory was opened and became a part of the division of laboratories. The scope of its activities embraces all phases of veterinary laboratory work, including the manufacture of biological products for therapeutic and diagnostic use: Bacteriological, serological, and histo-pathological diagnostic tests and methods; and the laboratory examination of meats and meat food products. The Army veterinary service is dependent solely upon this laboratory for its supply of biologics, which includes mallein, both intradermic and ophthalmic; equine infectious abortion vaccine; shipping fever vaccine; and antigens for use in the application of serological tests for glanders and equine infectious abortion.

The laboratory maintained a strain of Trypanosoma equiperdum and supplied infected animals to laboratories of the Sixth and Eighth Corps areas.

Biologics issued:		
Intradermic mallein	doses	374,420
Ophthalmic mallein	do	3,260
Shipping fever bacterin	c. c.	11,676
Glanders antigen	do	120
Equine infections abortion bacterin	do	19,640
Autogenous bacterin, treatments		19
Equine infectious abortion antigen	c. c.	500
Control sera for fixations tests:		
Dourine		10
Infectious abortion		25
Equine infectious abortion antiserum	c. c.	6,000

Research work.—In practically every laboratory connected with the division of laboratories of the Army Medical School, research work has been conducted during the year. Among the problems that have been taken up are the following:

New pneumococcus vaccine.—Work has been pursued during the entire year on the preparation of a new pneumococcus vaccine, to take the place of the vaccine heretofore issued for immunization against pneumonia. This new vaccine, which may be called the "Triple Respiratory Vaccine," contains pneumococci, streptococci, and influenza bacilli, the purpose being to prepare a vaccine in which the total number bacteria shall not exceed the number now contained in the pneumococcus vaccine. This vaccine has been adopted, because the pneumococcus alone is not responsible for the majority of respiratory infections.

Streptococcus investigations.—Researches upon the hemolytic streptococci have been continued and a survey was made at Fort Slocum, which confirmed the results of previous surveys, namely, that there is no excessive transfer of Streptococcus hemolyticus in peace time at recruit depots. A great deal of work has been done upon the identification of subgroups of hemolytic streptococci by agglutination, absorption, vaccination, and serum protection experiments, and some experimental work in the treatment of tonsil carriers of this organism by the X ray.

Protein sensitization.—A very large amount of work has been done upon this subject which indicates both protein sensitization in relation to asthma and hay fever and food sensitization in its relation to asthma, urticaria, skin diseases, malnutrition of infants, and various indefinite gastric and intestinal disorders. A large number of patients have been treated with pollen extracts in efforts to desensitize them against the particular pollen to which they are susceptible. A moderate number of food protein sensitization cases have been greatly benefited by the elimination of the particular food from their diet, responsible for the reaction, and in a few cases the results have been brilliant. It is believed that the results accomplished by this work warrant its continuation in especially selected cases, but the tests involve a great volume of work, and require practically the entire time of one officer.

A total of 75 cases of hay fever were tested for pollen sensitiveness. The school has now available for performing the skin test 13 different pollens responsible for the "spring" type of hay fever and 6 pollens responsible for the "fall" type of hay fever. Thirty-seven patients availed themselves of desensitive injections; of these 8 per cent obtained complete relief from their symptoms and 70 per cent showed marked improvement in their condition. In about 22 per cent the symptoms persisted and were apparently not affected by the treatment.

During the year a total of 121 patients have been tested for protein sensitization, exclusive of the hay fever cases. As there are a large number of proteins to which patients may be sensitive, each case has called for a large number of individual tests. The average time devoted to each, is one and a half hours. A total of 3,266 separate tests, exclusive of controls, were required for these 121 patients, or an average of 32 tests per individual. The school now has available 69 food proteins, 12 epidermal and miscellaneous proteins, and 12 bacterial proteins for use in making sensitization tests. As already noted, the results obtained in some of the cases have been brilliant, and in about 50 per cent, the patients have been benefited. The problem of food sensitization is a very large one, and should be studied from the chemical standpoint as well as clinically. The results obtained warrant further research along this line.

In addition to the subjects mentioned, research work has been conducted upon the spirocheticidal value of disodium ethyl arsinate; the production of CO_2 by the typhoid bacillus and the mechanism of the Russell double sugar tube; advantages of culture media containing small amounts of agar; the classification and differential diagnosis of the aestivo-autumnal malaria plasmodia; and various problems connected with complement fixation reactions, including work on a new gonococcus antigen, and the effect of cholesterinemia on the Wasserman test.

DIVISION OF ROENTGENOLOGY.

A Wappler and a Waite & Bartlett base hospital type machines were installed in the laboratory. The 14 Campbell stereoscopes were rebuilt and 11 were made serviceable. In the clinic the original installation was improved by the substitution of brass tubing for

bronze wire in the fluoroscopic and treatment rooms. A Potter-Buckey diaphragm was made and added to the equipment in the radiographic room.

The shopwork was improved greatly. The repair of apparatus broken during the course of instruction has progressed well, little requiring salvage.

Numerous appliances to facilitate the instruction of students and the X-ray work required of the school, such as lead protection screens, lead-lined boxes, compression cones, magnets, and switches for controlling the shifts of vertical plate changer in chest work, etc., have been manufactured for the school. The latter two items have also been manufactured for and are now in service in several of our larger general hospitals. There has been increased amount of repair work from other departments of the school. Electrical instruments and mechanical labor-saving devices have been made serviceable. Miniature transformers, autotransformers, induction coils, etc., have been constructed for instruction and demonstration to the students to enable them to grasp more clearly the principles of these appliances. Three instruction type X-ray machines with exposed wiring were completed and installed. X-ray repair work has been done in a number of posts by parties sent out from this laboratory.

In addition to the instruction of officers and enlisted men in roentgenology, an active clinic has been maintained for the X-ray examination of patients referred to it from the attending surgeon's office in Washington, examining boards, and others. Selected cases are frequently sent from the Walter Reed General Hospital for some particular form of examination and a few cases have been sent from camps or hospitals in other parts of the country.

HISTORICAL DIVISION.

This division was transferred from the Office of the Surgeon General on July 21, 1920. It has been occupied in the preparation of various volumes of the History of the Medical Department in the World War. Several volumes are now well advanced, and it is expected that a number will be published and distributed during the coming year. So far, however, but one is in press, Anthropology, Part I, Volume XV, Statistics. It is expected that this volume will be ready for distribution about August 1, 1921.

CHEMICAL LABORATORY FOR EXAMINATION OF MEDICAL SUPPLIES.

Three hundred and forty-six samples of drugs and medicines, laboratory reagents, general laboratory and hospital supplies, and and miscellaneous items were analyzed and otherwise examined, and reports individually rendered thereon.

DIVISION OF PHYSICAL EXAMINATIONS.

Approximately 2,500 examinations have been conducted by this department. Of these 500 have been for appointment to the regular commissioned service; 247 for appointment to West Point Military Academy, as warrant officers, noncommissioned officers, or citizens' military training camp; 318 for promotions; 865 for enlistment; 538

examinations prior to separation from the service; and 25 for opinions as to physical fitness.

A rigid systematic routine is adhered to by which omissions and delays are avoided. All examinations are ordered by The Adjutant General of the Army or the Surgeon General, United States Army. Various special examining boards use the equipment and personnel of this department.

PROPERTY DIVISION.

This department has been a very active one, its activities involving the expenditure of approximately $125,000. The department purchased and vouchered $55,000 of this amount from allotments granted for the purchase of materials necessary in the manufacture of vaccine and biological products, and for the purchase of animals, food therefor, and laboratory apparatus.

The large shipments of vaccine made within the year, together with the exceptionally large classes of students enrolled here and the preparation of necessary requisitions and property reports, including the preservation and proper accounting for all classes of property, has entailed exacting clerical work and much correspondence.

STATISTICAL TABLES

TABLE I.—*Movement of the sick and strength, by States, white and colored enlisted men, United States, 1920.*

ABSOLUTE NUMBERS.

States.[1]	White.					Colored.				
	Mean strength.	Admissions.	Deaths.[2]	Discharges.[2]	Days.[2]	Mean strength.	Admissions.	Deaths.[2]	Discharges.[2]	Days.[2]
Alabama	355	475	1	3	4,287	.....	.....	.....	.....	.....
Alaska	876	273	2	6	4,346	.....	.....	.....	.....	.....
Arizona	1,675	1,200	6	35	17,257	3,299	1,300	16	32	21,413
Arkansas	4,192	3,376	6	170	41,849	40	22	1	1	761
California	8,758	5,854	43	383	131,501	1	12	1	5	769
Colorado	1,278	1,882	6	127	29,357	4	10	.....	1	552
Delaware	221	155	.....	3	2,443	.....	.....	.....	.....	.....
District of Columbia	2,080	1,920	8	136	54,918	154	69	.....	4	2,129
Florida	981	901	1	12	9,205	.....	.....	.....	.....	.....
Georgia	7,444	6,890	30	302	116,426	549	589	5	34	15,556
Illinois	6,419	5,567	32	274	105,772	3	2	.....	4	901
Indiana	636	496	2	9	5,621	.....	.....	.....	.....	.....
Iowa	1,764	1,373	4	30	23,333	1	.....	.....	.....	.....
Kansas	5,369	3,459	10	70	46,503	558	401	5	6	5,149
Kentucky	7,628	5,635	28	109	91,021	106	47	2	.....	893
Louisiana	570	699	5	9	11,155	2	3	.....	.....	24
Maine	607	310	1	8	4,852	.....	.....	.....	.....	.....
Maryland	7,663	6,494	25	214	102,188	8	6	.....	3	924
Massachusetts	2,865	1,462	6	32	19,318	1	.....	.....	.....	.....
Michigan	1,131	687	5	9	7,581	.....	.....	.....	.....	.....
Minnesota	572	375	.....	7	3,402	.....	.....	.....	.....	.....
Missouri	1,203	1,138	18	21	18,262	.....	.....	.....	.....	.....
Montana	74	24	.....	.....	339	.....	.....	.....	.....	.....
Nebraska	746	687	3	11	6,834	1	2	.....	.....	98
New Hampshire	136	91	.....	.....	1,407	.....	.....	.....	.....	.....
New Jersey	9,424	7,577	33	218	125,702	5	17	.....	1	293
New Mexico	332	405	2	24	5,761	2,616	1,160	13	7	17,378
New York	11,322	7,856	38	335	123,003	174	119	1	2	1,213
North Carolina	1,337	872	6	78	18,270	1	3	1	4	215
Ohio	3,672	2,588	11	68	33,418	5	9	.....	1	233
Oklahoma	2,378	1,433	8	12	21,011	.....	.....	.....	.....	.....
Oregon	164	53	.....	2	1,165	.....	.....	.....	.....	.....
Pennsylvania	701	751	4	27	13,120	.....	.....	.....	.....	.....
Rhode Island	381	137	.....	5	1,650	.....	.....	.....	.....	.....
South Carolina	4,175	2,641	7	50	37,001	10	8	.....	.....	268
South Dakota	12	4	.....	1	102	.....	.....	.....	.....	.....
Tennessee	10	2	.....	.....	23	.....	.....	.....	.....	.....
Texas	26,489	17,190	63	379	244,281	86	99	2	10	3,513
Utah	338	405	2	5	5,754	1	1	.....	.....	3
Vermont	602	396	1	16	4,709	1	.....	.....	.....	.....
Virginia	7,119	4,007	14	94	56,977	132	43	1	2	847
Washington	4,766	2,841	12	58	45,214	6	3	.....	2	65
West Virginia	42	4	.....	.....	42	.....	.....	.....	.....	.....
Wyoming	646	789	3	20	10,466	.....	.....	.....	.....	.....
Others	.....	25	.....	1	623	.....	11	1	3	548
Total	139,153	101,399	446	3,373	1,607,469	7,764	3,936	49	122	73,745

[1] No admissions, deaths, discharges, or days for States omitted.
[2] Does not include deaths, discharges, and days for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

TABLE II.—*Movement of the sick and strength, by large stations, white and colored enlisted men, United States, 1920.*[1]

ABSOLUTE NUMBERS.

Stations.	White.					Colored.				
	Mean strength.	Admissions.	Deaths.	Discharges.	Days.	Mean strength.	Admissions.	Deaths.	Discharges.	Days.
Camp Benning, Ga.	2,128	2,289	1	77	36,115	510	541	3	32	14,360
Fort Bliss, Tex.[2]	5,152	3,329	11	50	58,156	21	67	1	7	2,358
Columbus Barracks, Ohio	1,400	1,460	7	28	18,949	.....	.....	.....	.....	.....
Camp Devens, Mass.	1,369	711	3	15	10,198	1	.....	.....	.....	.....
Camp Dix, N. J.	5,960	5,088	14	161	93,160	.....	.....	.....	.....	.....
Camp Dodge, Iowa	1,450	1,227	3	28	21,753	1	.....	.....	.....	.....
Camp Eustis, Va.	1,218	813	1	17	12,166	.....	.....	.....	.....	.....
Camp Gordon, Ga.	2,157	1,553	6	47	21,427	39	28	.....	.....	621
Camp Grant, Ill.	5,344	4,076	16	70	59,431	4	1	.....	1	350
Camp Holabird, Md.[3]	2,260	2,168	4	43	21,019	8	3	.....	.....	12
Camp Jackson, S. C.	3,860	2,447	7	43	34,271	10	7	.....	.....	267
Jefferson Barracks, Mo.	1,203	1,129	18	21	18,198	.....	.....	.....	.....	.....
Camp Knox, Ky.	1,984	1,250	4	29	23,859	93	30	1	.....	606
Fort Leavenworth, Kans.	1,218	855	2	22	12,075	256	163	1	2	1,878
Camp Lewis, Wash.	3,453	2,075	12	38	34,853	1	2	.....	1	54
Camp Meade, Md.	3,299	2,339	5	83	39,586	.....	.....	.....	.....	.....
Fort McDowell, Calif.	1,449	1,483	9	49	20,948	.....	.....	.....	.....	.....
Fort Oglethorpe, Ga.	1,252	1,051	4	25	15,821	.....	.....	.....	.....	.....
Camp Pike, Ark.	4,048	3,252	6	161	40,124	40	21	1	1	754
Fort Riley, Kans.[4]	4,151	2,606	8	48	34,423	302	237	4	4	3,251
Fort Sam Houston, Tex.[5]	10,774	7,964	36	247	115,349	64	27	1	3	920
Camp Sherman, Ohio	1,610	766	3	34	11,444	1	.....	.....	.....	.....
Fort Sill, Okla.	2,274	1,376	8	11	20,288	.....	.....	.....	.....	.....
Fort Slocum, N. Y.	1,878	1,743	5	24	20,164	2	6	.....	.....	77
Camp Upton, N. Y.	2,217	1,749	14	51	30,975	11	1	.....	.....	12
Camp Zachary Taylor, Ky.	4,848	3,235	23	68	54,252	.....	.....	.....	.....	.....

[1] Does not include deaths, discharges, and days lost for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.
[2] Includes the strength and the sick from adjacent commands.
[3] Includes hospital cases from Fort Howard.
[4] Includes the strength and the sick from Camp Funston.
[5] Includes the strength and the sick from Kelly Field and Camp Travis; also includes some hospital cases from other adjacent commands.

TABLE III.—*Movement of the sick, by arms of service, total officers, and enlisted men by color, 1920, absolute numbers.*

Arms of service.	Admissions.								Deaths.[1]							
	Officers.	American troops, enlisted men.			Native troops.		Total enlisted men including native troops.	Total officers and enlisted men including native troops.	Officers.	American troops, enlisted men.			Native troops.		Total enlisted men, including native troops.	Total officers and enlisted men, including native troops.
		White.	Colored.	Total.	Porto Ricans.	Philippine scouts.				White.	Colored.	Total.	Porto Ricans.	Philippine scouts.		
Artillery	857	20,719	33	20,752	7	376	21,135	21,992	8	65	.....	65	.....	2	67	75
Aviation	369	7,108	6	7,114	.....	1	7,115	7,484	2	21	.....	21	.....	.....	21	23
Cavalry	468	9,209	1,698	10,907	1	5	10,913	11,381	4	28	21	49	.....	.....	49	53
Engineers	158	3,328	7	3,335	.....	270	3,605	3,763	1	12	.....	12	.....	.....	12	13
Infantry	1,890	36,067	2,372	38,439	1,354	1,854	41,647	43,537	16	158	24	182	2	10	194	210
Medical Department	968	15,279	184	15,463	28	6	15,497	16,465	13	64	8	72	.....	.....	72	85
Ordnance	131	2,295	10	2,305	8	.....	2,313	2,444	1	13	.....	13	.....	.....	13	14
Quartermaster	478	22,096	357	22,453	62	24	22,539	23,017	7	115	4	119	.....	.....	119	126
Signal Corps	121	4,645	7	4,652	1	59	4,712	4,833	.....	19	.....	19	.....	.....	19	19
Tank Corps	33	1,505	.....	1,505	.....	.....	1,505	1,538	.....	4	.....	4	.....	.....	4	4
Others	361	10,970	251	11,221	5	6	11,232	11,593	5	85	4	89	.....	.....	89	94
Total	5,834	133,221	4,925	138,146	1,466	2,601	142,213	148,047	57	584	61	645	2	12	659	716

	Discharges.[1]								Days lost.[1]							
Artillery	33	529	.....	529	.....	39	568	601	18,996	338,763	647	339,410	94	4,862	344,366	363,362
Aviation	23	153	.....	153	.....	.....	153	176	9,465	109,863	202	110,065	.....	11	110,076	119,541
Cavalry	11	240	22	262	.....	.....	262	273	7,049	136,899	33,862	170,761	3	50	170,814	177,863
Engineers	18	117	5	122	.....	1	123	141	5,635	60,392	642	61,034	.....	2,297	63,331	68,966
Infantry	103	1,082	79	1,161	35	54	1,250	1,353	41,771	614,009	47,535	661,544	17,805	26,461	705,810	747,581
Medical Department	74	688	1	689	.....	.....	689	763	25,525	260,093	3,000	263,093	240	20	263,353	288,878
Ordnance	5	67	.....	67	.....	.....	67	72	3,172	34,519	132	34,651	144	.....	34,795	37,967
Quartermaster	38	576	16	592	1	1	594	632	14,330	357,281	7,101	364,382	855	329	365,566	379,896
Signal Corps	6	134	1	135	.....	.....	135	141	3,873	66,676	219	66,895	7	488	67,390	71,263
Tank Corps	1	40	.....	40	.....	.....	40	41	677	22,814	.....	22,814	.....	.....	22,814	23,491
Others	17	306	9	315	.....	1	316	323	7,773	176,017	4,295	180,312	16	89	180,417	188,190
Total	329	3,932	133	4,065	36	96	4,206	4,526	138,266	2,177,326	97,635	2,274,961	19,164	34,607	2,328,732	2,466,998

[1] Does not include deaths, discharges, and days lost for cases admitted prior to 1920, but does include those data for 1920 cases remaining into 1921.

TABLE IV.—*Officers and enlisted men, United States Army, returned to the United States from service overseas on account of disease, 1920; absolute numbers.*

	Officers.	Enlisted men, American troops.						Total officers and enlisted men.
		Europe.	Philippine Islands.			Hawaii.	Panama.	Siberia.	
			White.	Colored.	Total.				
Tuberculosis (all)	7	34	45	9	54	6	7	3	111
Venereal (all)	4	86	10	2	12	4	2	13	121
Osteoarthritis	.....	7	5	.....	5	4	.....	1	17
Other diseases of thyroid gland	.....	2	9	.....	9	2	.....	.....	13
Alcoholism, acute or chronic	.....	27	2	.....	2	1	1	1	32
Constitutional psychopathic state	.....	12	13	.....	13	.....	6	1	32
Mental deficiency	.....	8	17	.....	17	9	1	4	39
Dementia præcox	.....	18	12	1	13	8	11	2	52
Psychoneurosis	1	7	11	1	12	3	1	2	26
Other forms of mental alienation	.....	5	7	.....	7	2	3	.....	17
Epilepsy	.....	17	9	.....	9	.....	.....	1	27
Neurasthenia	2	7	.....	.....	.....	.....	.....	1	10
Refractive error	.....	.....	6	.....	6	5	1	.....	12
Otitis media	.....	3	13	1	14	3	4	.....	24
Ear, other diseases of	.....	1	1	.....	1	.....	.....	.....	2
Mitral insufficiency	.....	4	6	.....	6	2	.....	1	13
Cardiac disorder functional	.....	2	9	.....	9	.....	.....	.....	11
Bronchitis	3	31	11	3	14	1	1	3	53
Pleurisy, others	2	6	2	2	4	.....	.....	.....	12
Enteritis and colitis	1	5	.....	.....	.....	.....	.....	.....	6
Furuncle	.....	6	.....	.....	.....	.....	.....	.....	6
Cellulitis	.....	9	.....	.....	.....	.....	.....	.....	9
Scabies	.....	6	.....	.....	.....	.....	.....	.....	6
Pes planus	.....	8	43	.....	43	3	3	.....	57
Not specified or ill-defined	1	6	6	.....	6	3	.....	1	17
Epidemic diseases	1	8	3	.....	3	1	1	1	15
Diseases of the pharynx and tonsils	1	21	2	.....	2	.....	.....	.....	24
Other diseases of the nervous system	.....	16	8	.....	8	10	2	.....	36
Other diseases o the eye and annexa	1	1	13	5	18	5	4	.....	29
Other diseases of the circulatory system	1	13	20	2	22	3	.....	.....	39
Other diseases o the respiratory system	.....	7	7	1	8	3	1	2	21
Other general diseases	4	11	7	.....	7	3	4	3	32
Other diseases of mouth and annexa	.....	2	1	.....	1	1	.....	.....	4
Other diseases of the digestive system	.....	3	1	.....	1	5	1	2	12
Other nonvenereal diseases of the genito-urinary system	1	5	1	.....	1	4	2	.....	13
Other diseases of the skin and cellular tissue	.....	5	2	1	3	1	.....	.....	9
Other diseases of the organs of locomotion	1	8	10	.....	10	11	1	2	33
Other diseases of the stomach (cancer excepted)	1	12	1	.....	1	.....	.....	.....	14
Total	32	429	313	28	341	103	57	44	1,006

TABLE V.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	14	14	3	10	1	11
2	Typhus fever	10	10	2	8	.....	8
3	Relapsing fever	2	2	.....	2	.....	2
5	Malarial fevers (all)	1,770	1,540	34	1,401	105	1,506
5a	Malarial fever, estivo-autumnal	236	191	5	171	15	186
5b	Malarial fever, quartan	4	3	.....	3	.....	3
5c	Malarial fever, tertian	1,469	1,292	24	1,186	82	1,268
5d	Malarial fever, unclassified	61	54	5	41	8	49
6	Smallpox	53	51	.....	50	1	51
7	Measles	2,589	2,554	7	2,540	7	2,547
8	Scarlet fever	242	242	3	237	2	239
9	Whooping cough	12	12	2	10	.....	10
10	Diphtheria	250	250	9	240	1	241
11	Influenza	11,575	11,478	630	10,500	348	10,848
11a	Influenza, with pneumonia	869	862	33	810	19	829
11b	Influenza, without pneumonia	10,706	10,616	597	9,690	329	10,019
13	Mumps	2,087	1,931	28	1,886	17	1,903
16	Dysentery (all)	468	399	21	365	13	378
16a	Dysentery, amebic	387	334	17	307	10	317
16b	Dysentery, bacillary	4	4	.....	3	1	4
16c	Dysentery, unspecified or others	77	61	4	55	2	57
21	Erysipelas	77	76	5	70	1	71
24	Meningococcus meningitis	17	17	.....	17	.....	17
25a	Chicken pox	257	218	12	176	30	206
25b	German measles	17	14	.....	14	.....	14
25ca	Dengue	2,508	2,388	110	2,270	8	2,278
25cb	Febricula and undetermined fevers	968	871	22	831	18	849
25cc	Typhoid vaccination	2,617	2,589	9	2,514	66	2,580
25cd	Vaccinia	1,794	1,783	3	1,770	10	1,780
25ce	Carrier, epidemic diseases	276	274	11	262	1	263
25cf	Other epidemic diseases	1	1	.....	1	.....	1
27	Anthrax	4	4	.....	3	1	4
30	Mycoses	7	7	.....	7	.....	7
31	Tuberculosis of the respiratory system	828	749	81	590	78	668
32–36	Tuberculosis of the other organs	132	127	8	110	9	119
37	Disseminated tuberculosis	12	12	.....	10	2	12
	Tuberculosis (all)	972	888	89	710	89	799
38	Syphilis	2,915	2,857	47	2,680	130	2,810
39	Soft chancre	3,399	3,306	4	2,940	362	3,302
40	Gonococcus infection	10,230	10,080	41	9,501	538	10,039
	Venereal diseases (all)	16,544	16,243	92	15,121	1,030	16,151
41	Purulent infection, septicemia	5	5	.....	5	.....	5
42	Other infectious diseases	98	93	2	90	1	91
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	53	51	10	37	4	41
50	Benign tumors	350	334	15	298	21	319
51	Acute rheumatic fever	518	515	10	473	32	505
52b	Osteoarthritis	1,058	1,028	30	962	36	998
54	Pellagra	3	3	.....	3	.....	3
55	Beriberi	14	.....	.....	.....	.....	.....
56	Rickets	13	13	.....	12	1	13
57	Diabetes mellitus	33	32	7	25	.....	25
58a	Pernicious anemia	3	3	1	2	.....	2
58b	Other anemias and chlorosis	10	18	1	17	.....	17
59	Diseases of the pituitary gland	2	2	.....	2	.....	2

Army, 1920; absolute numbers.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
9	1	10	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	1	.....	.....	2
1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	3
1,049	16	1,065	21	74	89	163	4	244	4	.....	5	38	192	5
68	.....	68	1	8	15	23	.....	94	.....	.....	.....	6	39	5a
2	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	5b
945	14	959	19	3	68	131	3	149	4	.....	3	31	146	5c
34	2	36	1	63	6	9	1	.....	.....	.....	2	1	6	5d
43	1	44	.....	.....	.....	.....	1	.....	2	3	1	2	.....	6
2,339	7	2,346	101	31	.....	31	10	21	3	11	24	13	22	7
181	2	183	30	6	.....	6	2	.....	14	4	.....	.....	.....	8
10	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
166	1	167	63	3	.....	3	3	2	.....	3	.....	.....	.....	10
9,408	347	9,755	790	105	1	106	19	18	2	65	93	76	21	11
717	19	736	63	3	.....	3	8	2	.....	6	11	2	5	11a
8,691	328	9,019	727	102	1	103	11	16	2	59	82	74	16	11b
1,300	16	1,316	199	115	1	116	11	69	1	152	39	68	88	13
43	3	46	2	269	10	279	3	2	41	.....	5	.....	69	16
15	2	17	1	243	8	251	3	1	41	.....	3	.....	53	16a
3	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16b
25	.....	25	1	26	2	28	.....	1	.....	.....	2	.....	16	16c
55	1	56	4	5	.....	5	.....	1	2	2	1	.....	1	21
11	.....	11	2	.....	.....	.....	.....	1	1	2	.....	.....	.....	24
138	24	162	18	5	6	11	5	2	7	1	.....	13	26	25a
11	.....	11	1	2	.....	2	.....	.....	.....	.....	.....	.....	3	25b
19	.....	19	.....	2,240	8	2,248	.....	1	1	.....	9	1	119	25ca
467	18	485	12	268	.....	268	5	37	.....	8	34	7	90	25cb
2,440	66	2,506	13	19	.....	19	19	12	2	1	8	20	8	25ce
1,711	10	1,721	28	1	.....	1	6	21	3	.....	.....	11	.....	25cd
227	1	228	20	3	.....	3	1	9	1	.....	1	.....	2	25ce
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	25cf
3	.....	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	27
7	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
473	59	532	38	51	19	70	7	9	4	7	1	7	72	31
98	8	106	.....	3	1	4	3	2	1	3	.....	1	4	32–36
5	1	6	4	.....	1	1	.....	.....	.....	1	.....	.....	.....	37
576	68	644	42	54	21	75	10	11	5	11	1	8	76	
1,688	116	1,804	612	208	14	222	21	47	52	39	13	45	13	38
1,260	219	1,479	533	544	143	687	27	249	180	97	50	66	27	39
6,121	417	6,538	1,370	911	121	1,032	187	319	288	157	148	42	108	40
9,069	752	9,821	2,515	1,663	278	1,941	235	615	520	293	211	153	148	
4	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
90	.....	90	.....	.....	1	1	.....	.....	.....	.....	.....	5	.....	42
30	4	34	1	1	.....	1	1	4	.....	.....	.....	.....	2	43–49
230	16	246	24	29	5	34	8	5	2	.....	.....	2	14	50
367	32	399	76	7	.....	7	4	7	5	.....	7	1	2	51
747	34	781	69	62	2	64	31	13	8	30	2	17	13	52b
3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[1] 3	11	55
9	.....	9	.....	2	1	3	1	.....	.....	.....	.....	.....	.....	56
22	.....	22	.....	1	.....	1	.....	2	.....	.....	.....	.....	1	57
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58a
15	.....	15	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	58b
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59

[1] See p. 85.

TABLE V.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	II. GENERAL DISEASES NOT INCLUDED ABOVE—continued.						
60a	Exophthalmic goiter	93	91	4	84	3	87
60ba	Goiter, simple	78	76	4	72	.....	72
61–65	Other diseases of ductless glands	23	23	1	22	.....	22
66	Alcoholism (acute or chronic)	1,483	1,480	19	1,440	21	1,461
67a	Chronic lead poisoning	4	4	.....	4	.....	
68a	Drug addiction	114	114	1	108	5	113
68b	Chronic poisoning by other organic substances.	5	5	.....	5	.....	5
69	Other general diseases	645	625	19	571	35	606
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	15	15	4	11	.....	11
71	Simple meningitis	8	8	.....	7	1	8
72	Tabes dorsalis	5	4	1	3	.....	3
73	Other diseases of the spinal cord	18	17	1	16	.....	16
74	Cerebral hemorrhage, apoplexy	11	11	3	6	2	8
75a	Hemiplegia	7	7	1	5	1	6
75ba	Facial paralysis	27	26	1	25	.....	25
75bb	Other paralyses without specified cause	29	27	2	25	.....	25
76	General paralysis of the insane	39	39	4	33	2	35
77a	Constitutional psychopatic state	337	336	4	330	2	332
77b	Mental deficiency	401	400	.....	394	6	400
77c	Dementia præcox	420	414	3	406	5	411
77d	Psychasthenia	29	29	10	19	.....	19
77e	Psychoneurosis	228	228	31	195	2	197
77f	Psychosis, alcoholic	50	50	1	47	2	49
77g	Psychosis, manic depressive	92	90	5	84	1	85
77h	Other forms of mental alienation	166	163	4	146	13	159
78	Epilepsy	385	384	2	371	11	382
79	Convulsions (nonepileptic)	33	33	.....	32	1	33
81	Chorea	23	23	.....	22	1	23
82a	Hysteria and results (psychoses excepted)	329	327	2	317	8	325
82b	Neuralgia	281	269	18	239	12	251
82c	Neuritis	278	258	35	215	8	223
84a	Neurasthenia	426	424	69	351	4	355
84b	Neuro-circulatory asthenia	49	47	3	44	.....	44
84c	Other diseases of the nervous system	804	797	20	747	30	777
	B. Organs of special sense.						
85	The eye and annexa (all)	1,993	1,920	88	1,753	79	1,832
85a	Refractive error	286	282	9	270	3	273
85b	Trachoma	77	77	2	73	2	75
85c	Conjunctivitis (others)	742	709	37	646	26	672
85d	Iritis	125	118	6	100	12	112
85e	Keratitis	124	119	.....	117	2	119
85f	Eyelids, diseases of	147	143	6	134	3	137
85g	Eye and annexa, other diseases of	492	472	28	413	31	444
86	The ear and the mastoid process (all)	1,811	1,793	56	1,699	38	1,737
86aa	Otitis media	1,442	1,431	44	1,353	34	1,387
86ab	Otitis externa	253	248	8	239	1	240
86ac	Defective hearing, cause not stated	15	15	.....	15	.....	15
86ad	Ear, other diseases of	51	49	3	45	1	46
86b	Mastoiditis	50	50	1	47	2	49

Army, 1920; absolute numbers—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
70	2	72	2	8	1	9	4	.....	.....	.....	.....	.....	2	60a
54	.....	54	2	4	.....	4	5	2	2	3	.....	.....	2	60ba
17	.....	17	1	2	.....	2	.....	1	.....	1	.....	.....	.....	61
915	17	932	222	155	4	159	39	54	33	21	1	2	1	66
2	.....	2	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	67a
94	5	99	5	3	.....	3	1	4	.....	.....	1	.....	.....	68a
4	.....	4	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	68b
473	32	505	46	23	3	26	11	3	11	.....	4	12	8	69
8	.....	8	1	1	.....	1	.....	1	.....	.....	.....	.....	.....	70
2	1	3	2	2	.....	2	.....	1	.....	.....	.....	.....	.....	71
3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	72
15	.....	15	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	73
4	1	5	1	1	1	2	.....	.....	.....	.....	.....	.....	.....	74
4	1	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75a
22	.....	22	2	.....	.....	.....	.....	.....	.....	1	.....	1	.....	75ba
18	.....	18	4	1	.....	1	1	1	.....	.....	.....	.....	2	75bb
29	2	31	1	1	.....	1	.....	2	.....	.....	.....	.....	.....	76
283	1	284	17	14	1	15	5	7	1	.....	3	.....	1	77aff
340	4	344	10	23	2	25	16	2	.....	1	2	.....	1	77b
353	4	357	18	11	1	12	9	13	1	.....	1	3	3	77c
13	.....	13	1	3	.....	3	1	.....	.....	1	.....	.....	.....	77d
145	1	146	12	16	1	17	16	3	2	.....	1	.....	.....	77e
26	1	27	16	4	1	5	.....	.....	1	.....	.....	.....	.....	77f
77	1	78	4	1	.....	1	1	1	.....	.....	.....	1	1	77g
118	12	130	6	11	1	12	2	5	.....	2	2	1	2	77h
337	11	348	21	10	.....	10	1	1	.....	.....	1	.....	1	78
32	1	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
18	1	19	1	.....	.....	.....	1	2	.....	.....	.....	.....	.....	81
266	6	272	21	8	2	10	8	11	1	1	1	2	.....	82a
208	11	219	9	11	1	12	3	4	2	.....	2	10	2	82b
164	8	172	28	10	.....	10	6	3	2	1	1	[1] 20	.....	82c
264	4	268	23	41	.....	41	10	10	3	.....	.....	1	1	84a
31	.....	31	2	8	.....	8	3	.....	.....	.....	.....	2	.....	84b
642	27	669	33	31	3	34	22	11	1	5	2	2	5	84c
1,326	57	1,383	111	86	22	108	147	51	15	13	4	32	41	85
149	2	151	3	18	1	19	94	2	1	3	.....	3	1	85a
70	2	72	1	1	.....	1	.....	1	.....	.....	.....	.....	.....	85b
501	19	520	61	27	7	34	19	19	10	7	2	10	23	85c
83	11	94	4	4	1	5	1	7	.....	.....	1	4	3	85d
104	2	106	5	.....	.....	.....	5	1	1	1	.....	2	3	85e
95	1	96	24	4	2	6	7	3	.....	1	.....	.....	4	85f
324	20	344	13	32	11	43	21	18	3	1	1	13	7	85g
1,246	34	1,280	112	184	4	188	60	51	13	28	5	6	12	86
1,060	31	1,091	95	105	3	108	35	23	10	22	3	4	7	86aa
112	1	113	6	69	.....	69	21	26	3	1	1	1	4	86ab
12	.....	12	.....	3	.....	3	.....	.....	.....	.....	.....	.....	.....	86ac
29	.....	29	2	4	1	5	4	1	.....	5	.....	1	1	86ad
33	2	35	9	3	.....	3	.....	1	.....	.....	1	.....	.....	86b

[1] See p. 85.

TABLE V.—*Admissions, United States*

Nos. of international classification	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
87	Pericarditis	11	11	.....	11	.....	11
88	Endocarditis and myocarditis (acute)	8	8	.....	7	1	8
89	Angina pectoris	15	15	4	11	.....	11
90a	Valvular diseases of the heart (all)	366	362	27	323	12	335
90aa	Aortic insufficiency	30	30	2	26	2	28
90ab	Aortic stenosis	12	10	.....	10	.....	10
90ac	Mitral insufficiency	252	250	22	221	7	228
90ad	Mitral stenosis	47	47	2	44	1	45
90ae	Other valvular diseases	25	25	1	22	2	24
90b	Cardiac hypertrophy and dilatation	48	45	2	42	1	43
90c	Myocarditis, chronic	84	82	15	62	5	67
90d	Other diseases of the heart (organic)	37	37	1	25	11	36
91a	Aneurysm	7	7	.....	4	3	7
91b	Arteriosclerosis	40	40	23	14	3	17
91c	Other diseases of the arteries	4	4	.....	3	1	4
92	Embolism and thrombosis (not cerebral)	9	9	1	5	3	8
93a	Hemorrhoids	1,155	1,149	81	979	89	1,068
93b	Varicocele	386	384	6	377	1	378
93c	Varicose veins	125	124	10	106	8	114
93d	Phlebitis	28	27	7	19	1	20
94	Diseases of the lymphatic system	973	914	14	847	53	900
95	Hemorrhage without specified cause	46	44	6	35	3	38
96a	Cardiac arrhythmia	35	35	5	30	.....	30
96b	Cardiac disorder, functional	122	122	6	116	.....	116
96c	Tachycardia	225	223	10	194	19	213
96d	Other diseases of the circulatory system	39	37	2	34	1	35
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa (all).	5,564	5,521	474	4,886	61	5,047
97a	Deviation of nasal septum, and spurs	568	566	79	486	1	487
97b	Turbinate hypertrophy	60	58	7	50	1	51
97c	Sinusitis	387	383	70	307	6	313
97d	Rhinitis	4,172	4,137	243	3,745	49	3,894
97e	Nasal fossæ, other diseases of	377	377	75	298	4	302
98	Diseases of the larynx (all)	611	600	43	535	22	557
98a	Laryngitis, acute catarrhal	603	592	43	528	21	549
98b	Larynx, other diseases of	8	8	.....	7	1	8
99	Bronchitis	13,790	13,297	867	12,071	359	12,430
100	Pneumonia, broncho	426	415	16	390	9	399
101a	Pneumonia, lobar	499	471	12	439	20	459
101b	Pneumonia, not otherwise defined	4	4	.....	4	.....	4
102a	Pleurisy, suppurative	20	20	.....	18	2	20
102b	Pleurisy, serofibrinous	132	125	8	115	2	117
102c	Pleurisy, others	495	475	26	411	38	449
105	Asthma	308	295	15	268	12	280
107	Other diseases of the respiratory system	42	41	4	35	2	37
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).						
108a	Pyorrhea alveolaris	69	67	12	54	1	55
108b	Other diseases of the mouth and annexa	884	854	58	765	31	796
109a	Adenoid vegetation	41	41	.....	40	1	41
109ba	Pharyngitis, acute catarrhal	4,153	4,093	170	3,870	53	3,923
109bb	Pharynx, other diseases of	1,241	1,237	31	1,181	25	1,206
109bc	Tonsillitis, acute, follicular	13,586	13,540	403	12,932	305	13,137
109bd	Tonsillitis, chronic	1,596	1,592	149	1,419	24	1,443
109be	Other diseases of the pharynx and tonsils	655	654	27	615	12	627
110	Diseases of the æsophagus	2	2	.....	2	.....	2
111a	Ulcer of the stomach	48	48	5	41	2	43

Army, 1920; absolute numbers—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.		
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
10	.....	10	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	87
5	1	6	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	88
10	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	89
282	10	292	9	19	2	21	6	1	4	2	.....	.....	4	90a
22	2	24	1	2	.....	2	1	.....	.....	.....	.....	.....	.....	90aa
9	.....	9	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	90ab
199	6	205	5	11	1	12	3	1	1	1	.....	.....	2	90ac
37	1	38	2	2	.....	2	.....	.....	2	1	.....	.....	.....	90ad
15	1	16	1	4	1	5	2	.....	.....	.....	.....	.....	.....	90ae
35	.....	35	1	4	1	5	1	1	.....	.....	.....	.....	3	90b
47	4	51	3	6	1	7	1	2	3	.....	.....	2	.....	90c
21	2	23	4	.....	9	9	.....	.....	.....	.....	.....	.....	.....	90d
2	3	5	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	91a
8	2	10	2	4	1	5	.....	.....	.....	.....	.....	.....	.....	91b
2	1	3	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	91c
4	3	7	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	92
760	80	840	99	57	9	66	24	26	6	7	.....	2	4	93a
285	1	286	28	31	.....	31	10	22	.....	1	.....	.....	2	93b
88	7	95	2	8	1	9	6	.....	2	.....	.....	.....	1	93c
16	.....	16	3	.....	1	1	.....	.....	.....	.....	.....	1	.....	93d
529	42	571	94	102	11	113	8	64	37	7	6	32	27	94
32	3	35	1	.....	.....	.....	2	.....	.....	.....	.....	.....	2	95
15	.....	15	1	11	.....	11	1	.....	1	.....	1	.....	.....	96a
79	.....	79	1	23	.....	23	9	.....	4	.....	.....	.....	.....	96b
143	18	161	27	8	1	9	6	7	1	2	.....	.....	2	96c
28	1	29	1	3	.....	3	1	.....	.....	.....	1	1	1	96d
4,018	50	4,068	388	179	11	190	166	107	16	11	1	10	33	97
397	1	398	9	38	.....	38	30	10	2	.....	.....	1	1	97a
33	1	34	2	8	.....	8	5	2	.....	.....	.....	.....	2	97b
236	5	241	24	20	1	21	16	7	.....	4	.....	2	2	97c
3,083	39	3,122	343	110	10	120	108	85	8	7	1	7	28	97d
269	4	273	10	3	.....	3	7	3	6	.....	.....	.....	.....	97e
426	21	447	59	11	1	12	4	6	10	18	1	6	5	98
420	20	440	59	11	1	12	4	6	10	18	.....	6	5	98a
6	1	7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	98b
8,985	322	9,307	1,542	409	37	446	291	284	86	392	82	293	200	99
264	8	272	48	14	1	15	11	5	1	41	6	.....	11	100
315	19	334	65	27	1	28	3	3	10	7	9	6	22	101a
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	101b
13	2	15	.....	4	.....	4	.....	.....	.....	1	.....	.....	.....	102a
69	1	70	25	8	1	9	5	5	2	.....	1	1	6	102b
264	25	289	66	52	13	65	5	18	3	2	1	2	18	102c
217	10	227	8	12	2	14	24	4	3	.....	.....	6	7	105
28	.....	28	1	4	2	6	.....	2	.....	.....	.....	.....	1	107
41	1	42	3	4	.....	4	2	1	1	1	1	1	1	108a
643	26	669	36	26	5	31	13	21	16	5	5	16	14	108b
37	1	38	.....	1	.....	1	1	1	.....	.....	.....	.....	.....	109a
3,471	50	3,521	85	89	3	92	68	76	56	11	14	32	28	109ba
806	12	818	266	51	13	64	1	15	25	16	1	.....	4	109bb
10,809	286	11,095	1,191	247	19	266	198	212	63	162	50	29	17	109bc
1,180	12	1,192	69	85	12	97	51	19	10	2	3	2	2	109bd
460	8	470	84	28	4	32	9	7	6	17	2	.....	1	109be
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	110
30	2	32	7	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	111a

TABLE V.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED)—continued.						
111b	Ulcer of the duodenum	24	24	9	15	.....	15
112	Other diseases of the stomach (cancer excepted).	2,625	2,525	150	2,244	131	2,375
114a	Diarrhea (cause not stated)	842	818	67	695	56	751
114b	Enteritis and colitis	1,788	1,631	141	1,448	42	1,490
115	Ankylostomiasis	443	350	.....	344	6	350
116	Other intestinal parasites	199	145	9	121	15	136
117	Appendicitis and typhlitis	1,663	1,647	106	1,445	96	1,541
118a	Hernia	1,330	1,318	105	1,175	38	1,213
118b	Intestinal obstruction	37	36	6	29	1	30
119a	Fistula in ano	104	100	6	88	6	94
119b	Other diseases of the intestines	7,003	6,490	319	5,789	382	6,171
123	Biliary calculi	8	8	2	6	.....	6
124a	Cholecystitis	162	160	13	137	10	147
124b	Other diseases of the liver	390	382	18	351	13	364
127	Other diseases of the digestive system	134	133	7	120	6	126
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	42	39	5	31	3	34
129	Chronic nephritis	156	151	41	105	5	110
131a	Pyogenic infection of the kidney	67	67	13	53	1	54
131b	Other diseases of the kidney and annexa	103	102	23	74	5	79
132a	Nephrolithiasis	54	54	11	42	1	43
132b	Vesical calculi	13	13	4	8	1	9
133a	Cystitis	195	190	10	162	18	180
133b	Other diseases of the bladder	61	60	.....	57	3	60
134a	Stricture of the urethra (nonvenereal)	23	22	4	14	4	18
134b	Urethritis (nonvenereal)	319	315	2	307	6	313
135	Diseases of the prostate	36	36	6	29	1	30
136a	Balanitis	165	163	.....	158	5	163
136b	Epididymitis	126	118	4	110	4	114
136c	Hydrocele	133	128	6	117	5	122
136d	Warts, external genital organs	125	125	2	115	8	123
136e	Other nonvenereal diseases of the male genital organs.	262	245	5	220	20	240
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152a	Carbuncle	224	214	23	189	2	191
152b	Furuncle	2,595	2,514	73	2,401	40	2,441
153a	Acute abscess	1,355	1,285	24	1,212	49	1,261
153b	Cellulitis	1,506	1,428	41	1,357	30	1,387
154a	Trichophytosis	792	693	10	656	27	683
154b	Nails, defects and diseases of	852	829	7	804	18	822
154c	Ectoparisites	278	278	1	276	1	277
154d	Eczema	375	362	14	343	5	348
154e	Erythema	66	66	1	65	.....	65
154f	Herpes	271	263	6	252	5	527
154g	Impetigo	297	295	3	291	1	292
154h	Psoriasis	64	62	4	57	1	58
154i	Scabies	3,422	3,408	17	3,381	10	3,391
154j	Other diseases of the skin and cellular tissue	1,406	1,380	24	1,314	42	1,356

Army, 1920; absolute numbers—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.		
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
13	.....	13	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	111b
1,665	100	1,765	212	200	31	231	65	70	15	3	14	38	62	112
488	21	509	57	93	35	128	2	4	40	7	4	.....	24	114a
1,063	41	1,104	104	166	1	167	72	28	12	.....	3	117	40	114b
320	3	323	1	15	3	18	8	.....	.....	.....	.....	6	87	115
75	.....	75	9	26	15	41	2	5	4	.....	.....	1	53	116
1,128	80	1,208	74	119	16	135	55	61	6	.....	2	4	12	117
944	35	979	92	63	3	66	33	30	8	4	1	7	5	118a
27	1	28	.....	1	.....	1	.....	1	.....	.....	.....	.....	1	118b
73	6	79	12	1	.....	1	1	1	.....	.....	.....	.....	4	119a
4,589	316	4,905	80	647	66	713	158	213	59	14	29	84	429	119b
6	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	123
96	5	101	9	23	5	28	.....	5	1	1	2	1	1	124a
196	12	208	103	32	1	33	2	11	3	1	3	5	3	124b
91	4	95	13	8	2	10	5	2	.....	1	.....	1	.....	127
24	2	26	4	1	1	2	.....	2	.....	.....	.....	.....	3	128
92	4	96	3	3	1	4	5	1	1	.....	.....	.....	5	129
25	1	26	5	3	.....	3	5	14	.....	1	.....	.....	.....	131a
45	5	50	11	7	.....	7	5	6	.....	.....	.....	.....	1	131b
35	1	36	3	.....	.....	.....	3	.....	.....	.....	1	.....	.....	132a
8	.....	8	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	132b
118	14	132	10	10	4	14	12	8	4	.....	.....	2	3	133a
48	2	50	3	5	1	6	.....	1	.....	.....	.....	1	.....	133b
9	4	13	2	1	.....	1	.....	1	.....	.....	1	1	.....	134a
219	5	224	46	31	1	32	8	.....	.....	1	2	1	3	134b
23	.....	23	1	3	1	4	.....	2	.....	.....	.....	.....	.....	135
132	5	137	3	14	.....	14	5	.....	1	3	.....	2	.....	136a
77	3	80	11	6	1	7	1	7	2	5	1	2	6	136b
92	3	95	10	6	2	8	5	4	.....	.....	.....	4	1	136c
67	5	72	13	23	3	26	6	2	3	1	.....	.....	.....	136d
175	18	193	15	10	2	12	6	3	2	8	1	7	10	136e
118	2	120	47	15	.....	15	4	2	1	1	1	4	6	152a
1,796	35	1,831	354	63	5	68	110	57	11	5	5	38	43	152b
942	37	979	97	79	12	91	38	46	7	.....	3	35	35	153a
896	30	926	250	89	.....	89	76	31	5	4	6	50	28	153b
425	7	432	8	144	20	164	57	17	4	1	.....	2	97	154a
580	16	596	59	49	2	51	72	39	3	2	.....	3	20	154b
258	1	259	7	2	.....	2	6	.....	3	.....	.....	.....	.....	154c
244	4	248	42	27	1	28	16	9	.....	4	1	0	4	154d
53	.....	53	3	4	.....	4	1	3	.....	.....	1	.....	.....	154e
183	4	187	23	18	1	19	12	10	3	3	.....	.....	8	154f
181	1	182	82	11	.....	11	8	8	.....	1	.....	1	1	154g
45	1	46	9	1	.....	1	2	.....	.....	.....	.....	1	1	154h
2,804	8	2,812	485	28	2	30	41	5	13	3	2	3	11	154i
994	35	1,029	122	107	7	114	51	30	2	6	2	8	18	154j

TABLE V.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155a	Osteomyelitis	46	46	1	44	1	45
155b	Other diseases of the bone	97	91	5	81	5	86
155c	Fractures, faulty union of	92	91	.....	88	3	91
156a	Ankylosis of joints	40	40	2	37	1	38
156b	Other diseases of the joints	157	152	3	133	16	149
158a	Hallux valgus	88	87	4	80	3	83
158b	Myositis	182	174	8	158	8	166
158c	Pes planus	714	712	5	682	25	707
158d	Tenosynovitis	94	93	1	90	2	92
158e	Other diseases of the organs of locomotion	1,432	1,406	61	1,283	62	1,345
	XI. MALFORMATION.						
159	Congenital malformations	126	122	5	114	3	117
	XV. ILL-DEFINED DISEASES.						
204–205	Not specified or ill-defined	6,876	6,713	273	6,100	340	6,440
	Total for diseases	148,047	143,980	5,834	133,221	4,925	138,146
	XIV. EXTERNAL CAUSES.						
165–174	Suicides (all)	62	61	[illegible]	54	1	55
	Accidental traumatisms	13,220	12,931	432	11,919	580	12,499
175	Poisoning by food	228	228	18	203	7	210
176–177	Other acute poisonings (gas excepted)	149	148	4	132	12	144
178	Conflagrations	12	12	.....	12	.....	12
179	Burns (conflagrations excepted)	122	121	4	112	5	117
180	Mechanical suffocation	5	5	1	4	.....	4
181	Absorption of irrespirable or poisonous gas	25	24	.....	24	.....	24
182	Drowning	66	66	3	61	2	63
183	Firearms (wounds of war excepted)	682	666	13	607	46	653
184	Cutting and piercing instruments	2,092	2,023	28	1,907	88	1,995
185	Fall	4,447	4,329	166	3,969	194	4,163
187	Machines	178	174	[illegible]	169	4	173
188a	Railroad accident	59	59	3	53	3	56
188b	Street-car accident	67	66	1	65	.....	65
188c	Automobile accident	1,078	1,069	60	986	23	1,009
188d	Balloon and airoplane accident	203	203	42	161	.....	161
188ea	Motorcycle accident	737	734	25	697	12	709
188eb	Other vehicles	1,041	1,017	11	970	36	1,006
188fb	Other crushings	805	798	17	743	38	781
189	Animals (not poisonous)	1,224	1,189	35	1,044	110	1,154
193	Excessive cold	36	36	1	34	1	35
194	Excessive heat	145	144	2	140	[illegible]	142
195–196	Accidental electric shocks	20	19	2	16	1	17
197–199	Homicide (all)	12	11	.....	9	2	11
202	Other external violence (cause specified)	3,567	3,432	57	3,272	103	3,375
202a	Falling objects	1,075	1,032	12	983	37	1,020
202b	Jumping from height	169	159	4	149	6	155
202d	Splinters	104	104	.....	99	5	104
202e	Other causes	2,219	2,137	41	2,041	55	2,096
203	Other external violence (cause not specified)	8,891	8,691	320	8,053	318	8,371
203a	Athletic exercises	3,638	3,560	151	3,289	120	3,409
203b	Drilling and marching	386	367	25	309	33	342
203c	Fighting (brawls)	780	768	1	735	32	767
203d	Other causes	4,087	3,996	143	3,720	133	3,853
	Total for diseases	148,047	143,980	5,834	133,221	4,925	138,146
	Total for external causes	25,953	25,325	820	23,497	1,008	24,505
	Grand total	174,000	169,305	6,651	156,718	5,933	162,651

Army, 1920; absolute numbers—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.		
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
36	1	37	5	1	.....	1	.....	1	.....	.....	1	.....	.....	155a
59	4	73	4	2	1	3	2	2	1	.....	1	5	1	155b
66	3	69	8	8	.....	8	3	1	.....	2	.....	1	.....	155c
26	1	27	.....	2	.....	2	7	.....	1	1	.....	.....	.....	156a
99	16	115	17	6	.....	6	7	3	.....	.....	1	1	4	156b
58	3	61	8	1	.....	1	1	.....	9	3	.....	1	.....	158a
122	8	130	11	16	.....	16	8	1	.....	.....	.....	.....	8	158b
503	25	528	43	102	.....	102	25	9	.....	.....	.....	.....	2	158c
59	2	61	25	4	.....	4	1	1	.....	.....	.....	1	.....	158d
1,077	55	1,132	58	50	7	57	51	30	9	6	2	14	12	158e
90	3	93	10	4	.....	4	4	4	2	.....	.....	.....	4	159
4,800	239	5,039	360	505	101	606	200	64	24	96	51	29	134	204–205
101,399	3,936	105,335	12,033	10,027	989	11,016	2,946	3,113	1,338	1,565	800	1,466	2,601	
38	.....	38	9	2	1	3	3	2	.....	.....	.....	1	.....	165–174
9,507	460	9,967	1,048	478	120	598	436	331	35	62	22	92	197	
63	.....	63	1	122	7	129	3	14	.....	.....	.....	.....	.....	175
101	12	113	15	5	.....	5	2	6	.....	1	2	.....	1	176–177
4	.....	4	.....	.....	.....	.....	.....	.....	.....	8	.....	.....	.....	178
100	2	102	3	1	3	4	2	5	.....	1	.....	.....	1	179
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	180
16	.....	16	4	1	.....	1	3	.....	.....	.....	.....	.....	1	181
39	1	40	6	10	1	11	1	4	1	.....	.....	.....	.....	182
497	43	540	47	18	3	21	23	11	2	8	1	6	10	183
1,517	75	1,592	187	53	13	66	71	60	6	8	5	30	39	184
3,082	152	3,234	392	174	42	216	132	129	20	26	14	42	76	185
147	4	151	10	3	.....	3	6	2	.....	1	.....	2	2	187
42	2	44	8	1	1	2	.....	1	.....	1	.....	.....	.....	188a
57	.....	57	4	3	.....	3	1	.....	.....	.....	.....	.....	1	188b
854	20	874	66	16	3	19	28	19	1	2	.....	2	7	188c
149	.....	149	2	4	.....	4	3	3	.....	.....	.....	.....	.....	188d
532	10	542	101	18	2	20	29	16	1	.....	.....	1	2	188ea
842	34	876	72	15	2	17	22	16	.....	3	.....	4	20	188eb
608	27	635	51	18	11	29	39	21	3	3	.....	2	5	188fb
853	78	931	79	16	32	48	71	24	1	.....	.....	3	32	189
23	1	24	.....	1	.....	1	1	.....	.....	8	1	.....	.....	193
116	2	118	10	4	.....	4	4	5	1	.....	.....	.....	1	194
12	1	13	1	2	.....	2	1	.....	.....	.....	.....	.....	1	195–196
4	2	6	4	.....	.....	.....	.....	1	.....	.....	.....	1	.....	197–199
2,565	81	2,646	369	133	22	155	112	71	10	10	2	40	95	202
831	30	861	54	30	7	37	40	24	1	3	.....	11	32	202a
124	6	130	9	7	.....	7	5	3	.....	1	.....	3	7	202b
82	5	87	7	4	.....	4	6	.....	.....	.....	.....	.....	.....	202d
1,528	40	1,568	299	92	15	107	61	44	9	6	2	26	56	202e
6,121	250	6,371	860	387	68	455	314	273	36	40	22	80	120	203
2,644	103	2,747	294	93	17	110	125	109	14	3	7	37	41	203a
239	23	262	25	23	10	33	15	5	1	1	.....	6	13	203b
456	23	479	174	57	9	66	21	15	4	6	2	1	11	203c
2,782	101	2,883	367	214	32	246	153	144	17	30	13	36	55	203d
101,399	3,936	105,335	12,033	10,027	989	11,016	2,946	3,113	1,338	1,565	800	1,466	2,601	
18,386	797	19,183	2,301	1,007	211	1,218	871	683	82	120	47	214	414	
119,785	4,733	124,518	14,334	11,034	1,200	12,234	3,817	3,796	1,420	1,685	847	1,680	3,015	

TABLE V.—*Admissions, United States*

Office classification numbers.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	XIV. EXTERNAL CAUSES—continued.						
	The following are included above:						
	Diagnosis of injuries—						
1	Abrasions and blisters	1,940	1,855	49	1,773	33	1,806
2	Anaphylaxis	20	20	.....	20	.....	20
3	Concussion (brain)	146	145	12	128	5	133
4	Contusion	3,130	3,040	68	2,858	114	2,972
5	Crushing	82	81	11	68	2	70
6	Dermatitis	571	567	24	542	1	543
7	Dislocation of joint	383	376	24	336	16	352
8	Dislocation of articular cartilage of knee	31	30	2	28	.....	28
9	Epiphyseal separation	28	28	1	26	1	27
10	Eye and annexa, traumatisms	224	214	10	189	15	204
11	Foreign body	167	165	1	158	6	164
12	Fracture, simple	2,915	2,874	137	2,683	54	2,737
13	Fracture, compound	400	392	12	362	18	380
14	Fracture, faulty union	7	7	.....	6	1	7
15	Hemorrhage, and results	38	37	2	35	.....	35
16	Secondary result of injuries	113	111	7	100	4	104
17	Sprain of joint	4,374	4,258	150	3,898	210	4,108
18	Strain	839	819	39	747	33	780
19	Synovitis, traumatic, cause not specified	245	243	10	226	7	233
20	Wounds, multiple	201	200	10	186	4	190
21	Wounds, penetrating	171	168	6	145	17	162
22	Wounds, perforating	285	279	7	258	414	272
23	Wounds, others	7,352	7,161	156	6,627	378	7,005

Army, 1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Office classification numbers.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
1,273	16	1,289	320	56	17	73	62	42	10	9	.....	36	49	1
18	.....	18	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
105	5	110	7	3	.....	3	9	4	.....	.....	.....	1	.....	3
2,443	80	2,523	138	51	34	85	152	62	4	3	5	53	37	4
51	1	52	11	1	1	2	.....	3	.....	1	1	.....	1	5
440	1	441	16	20	.....	20	34	19	3	2	8	.....	4	6
265	11	276	34	10	5	15	13	9	1	3	1	2	5	7
23	.....	23	4	1	.....	1	.....	.....	.....	.....	.....	1	.....	8
19	1	20	22	2	.....	2	3	.....	.....	.....	.....	.....	.....	9
152	12	164	9	14	3	17	7	6	1	.....	.....	.....	10	10
123	6	129	11	14	.....	14	6	3	1	.....	.....	2	.....	11
1,950	42	1,992	397	89	12	101	131	95	2	12	7	13	28	12
247	17	264	65	16	1	17	13	11	1	7	2	1	7	13
5	1	6	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	14
21	.....	21	5	3	.....	3	1	4	.....	1	.....	.....	1	15
77	4	81	9	8	.....	8	3	1	2	.....	.....	1	1	16
3,107	176	3,283	319	168	34	202	153	106	26	14	5	33	83	17
621	23	644	32	45	10	55	27	17	2	2	1	9	11	18
152	7	159	52	1	.....	1	9	2	.....	10	.....	1	1	19
128	4	132	29	13	.....	13	9	4	2	1	.....	.....	1	20
108	15	123	22	4	2	6	10	1	.....	.....	.....	.....	3	21
194	14	208	44	4	.....	4	6	8	1	1	.....	1	5	22
5,366	308	5,674	617	238	70	308	162	186	22	27	9	53	138	23

TABLE VI.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	0.07	0.07	0.21	0.06	0.11	0.06
2	Typhus fever	.05	.05	.14	.05	.....	.04
3	Relapsing fever	.01	.01	.....	.01	.....	.01
	Malarial fevers (all)	8.45	7.68	2.37	7.92	11.06	8.08
5a	Malarial fever, estivo-autumnal	1.13	.95	.35	.97	1.58	1.00
5b	Malarial fever, quartan	.02	.01	.....	.02	.....	.02
5c	Malarial fever, tertian	7.01	6.44	1.67	6.71	8.63	6.81
5d	Malarial fever, unclassified	.29	.27	.35	.23	.84	.26
6	Smallpox	.25	.25	.....	.28	.11	.27
7	Measles	12.36	12.73	.49	14.37	.74	13.67
8	Scarlet fever	1.16	1.21	.21	1.34	.21	1.28
9	Whooping cough	.06	.06	.14	.06	.....	.05
10	Diphtheria	1.19	1.25	.63	1.36	.11	1.29
11	Influenza	55.26	57.21	43.96	59.39	36.64	58.23
11a	Influenza, with pneumonia	4.15	4.30	2.30	4.58	2.00	4.45
11b	Influenza, without pneumonia	51.11	52.91	41.66	54.81	36.64	53.77
13	Mumps	9.96	9.63	1.95	10.67	1.79	10.21
16	Dysentery (all)	2.23	1.99	1.47	2.06	1.37	2.03
16a	Dysentery, amebic	1.85	1.66	1.19	1.74	1.05	1.70
16b	Dysentery, bacillary	.02	.02	.....	.02	.11	.02
16c	Dysentery, unspecified or others	.37	.30	.28	.31	.21	.31
21	Erysipelas	.37	.38	.35	.40	.11	.38
24	Meningococcus meningitis	.08	.08	.....	.10	.....	.09
25a	Chicken pox	1.23	1.09	.84	1.00	3.16	1.11
25b	German measles	.08	.07	.....	.08	.....	.08
25ca	Dengue	11.97	11.90	7.68	12.84	.84	12.23
25cb	Febricula and undetermined fevers	4.62	4.34	1.54	4.70	1.90	4.56
25cc	Typhoid vaccination	12.49	12.90	.63	14.22	6.95	13.85
25cd	Vaccinia	8.56	8.89	.21	10.01	1.05	9.55
25ce	Carrier, epidemic diseases	1.32	1.37	.77	1.48	.11	1.41
25cf	Other epidemic diseases	.00	.00	.....	.00	.....	.01
27	Anthrax	.02	.02	.....	.02	.11	.02
30	Mycoses	.04	.03	.....	.04	.....	.04
31	Tuberculosis of the respiratory system	3.95	3.73	5.65	3.34	8.21	3.59
32–36	Tuberculosis of the other organs	.63	.63	.56	.62	.95	.64
37	Disseminated tuberculosis	.06	.06	.....	.06	.21	.06
	Tuberculosis (all)	4.64	4.43	6.21	4.02	9.37	4.29
38	Syphilis	13.92	14.24	3.28	15.16	13.69	15.08
39	Soft chancre	16.23	16.48	.28	16.63	38.12	17.72
40	Gonococcus infection	48.84	50.24	2.86	53.74	56.65	53.88
	Venereal diseases (all)	78.98	80.96	6.42	85.53	108.46	86.69
41	Purulent infection, septicemia	.02	.02	.....	.03	.....	.03
42	Other infectious diseaases	.47	.46	.14	.51	.11	49
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	.25	.25	.70	.21	.42	.22
50	Benign tumors	1.67	1.66	1.05	1.69	2.21	1.71
51	Acute rheumatic fever	2.47	2.57	.70	2.68	3.37	2.71
52b	Osteoarthritis	5.05	5.12	2.09	5.44	3.79	5.36
54	Pellagra	.01	.01	.....	.02	.....	.02
55	Beriberi	.07	.....	.....	.....	.....	.....
56	Rickets	.06	.06	.....	.07	.11	.07
57	Diabetes mellitus	.16	.16	.49	.14	.....	.13
58a	Pernicious anemia	.01	.01	.07	.01	.....	.01
58b	Other anemias and chlorosis	.09	.09	.07	.10	.....	.10
59	Diseases of the pituitary gland	.01	.01	.....	.01	.....	.01

Army, 1920; ratios per 1,000.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.06	0.13	0.07	.....	.....	.....	.....	.....	.....	.....	1.02	.....	.....	.....	1a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.16	0.51	.....	.....	2
.01	.....	.01	.....	.....	.....	.....	.....	0.23	.....	.....	.....	.....	.....	3
7.54	2.06	7.25	1.38	8.37	51.36	15.41	.80	55.13	3.24	.....	2.53	24.79	26.32	
.49	.....	.46	0.07	0.90	8.66	2.18	.....	21.24	.....	.....	.....	3.91	5.35	5a
.01	.....	.01	.....	.....	.....	.....	.....	23	.....	.....	.....	.....	14	5b
6.79	1.80	6.53	1.25	7.13	39.24	12.39	0.60	33.66	3.24	.....	1.52	20.22	20.01	5c
.24	.26	.25	.07	.34	3.46	.85	.20	.....	.....	.....	1.01	.65	.82	5d
.31	.13	.30	.....	.....	.....	.....	.20	.....	1.62	3.07	.51	1.30	.....	6
16.81	.90	15.97	6.64	3.51	.....	2.93	2.01	4.74	2.43	11.26	12.15	8.48	3.02	7
1.30	.26	1.25	1.97	.68	.....	.57	.40	.....	11.35	4.09	.....	.....	.....	8
.07	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
1.19	.13	1.14	4.14	.34	.....	.28	.60	.45	.....	3.07	.....	.....	.....	10
67.61	44.70	66.40	51.91	11.88	.58	10.02	3.81	4.07	1.62	66.53	47.09	49.57	2.88	11
5.15	2.45	5.01	4.14	.34	.....	.28	1.60	.45	.....	6.14	5.57	1.30	.69	11a
62.45	42.25	61.39	47.77	11.54	.58	9.74	2.21	3.62	1.62	60.39	41.52	48.27	2.19	11b
9.34	2.06	8.96	13.08	13.01	.58	10.97	2.21	15.59	.81	155.57	19.75	44.35	12.06	13
.31	.39	.31	.13	30.43	5.77	26.38	.60	.45	33.25	.....	2.53	.....	9.46	16
.11	.26	.12	.07	27.49	4.62	23.74	.60	.23	33.25	.....	1.52	.....	7.27	16a
.02	.13	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16b
.18	.....	.17	.07	2.94	1.15	2.65	.....	.23	.....	.....	1.01	.....	2.19	16c
.40	.13	.38	.26	.57	.....	.47	.....	.23	1.62	2.05	.51	.....	.14	21
.08	.....	.07	.13	.....	.....	.....	.....	.23	.81	2.05	.....	.....	.....	24
.99	3.09	1.10	1.18	.57	3.46	1.04	1.00	.45	5.68	1.02	.....	8.48	3.56	25a
.08	.....	.07	.07	.23	.....	.19	.....	.....	.....	.....	.....	.....	.41	25b
.14	.....	.13	.....	253.37	4.62	212.60	.....	.23	.81	.....	4.56	.65	16.31	25ca
3.36	2.32	3.30	.79	30.31	.....	25.35	1.00	8.36	.....	8.19	17.21	4.57	12.34	25cb
17.53	8.50	17.06	.85	2.15	.....	1.80	3.81	2.71	1.62	1.02	4.05	13.05	1.10	25cc
12.30	1.29	11.71	1.84	.11	.....	.09	1.20	4.74	2.43	.....	.....	7.18	.....	25cd
1.63	.13	1.55	1.31	.34	.....	.28	.20	2.03	.81	.....	.51	.....	.27	25ce
.....	.....	.....	.....	.....	.....	.....	.....	.23	.....	.....	.....	.....	.....	25cf
.02	.....	.02	.....	.....	.58	.09	.....	.....	.....	.....	.....	.....	.....	27
.05	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
3.40	7.60	3.62	2.50	5.77	10.96	6.62	1.40	2.03	3.24	7.16	.51	4.57	9.87	31
.70	1.03	.72	.....	.34	.58	.38	.60	.45	.81	3.07	.....	.65	.55	32–36
.04	.13	.04	.26	.....	.58	.09	.....	.....	.....	1.02	.....	.....	.....	37
4.14	8.77	4.38	2.76	6.11	12.12	7.09	2.01	2.49	4.06	11.26	.51	5.22	10.42	
12.13	14.94	12.28	40.21	23.53	8.08	21.00	4.21	10.62	42.17	39.92	6.58	29.35	1.78	38
9.05	28.21	10.07	35.02	61.53	82.51	64.97	5.42	56.26	145.98	99.28	25.32	43.05	3.70	39
43.99	53.70	44.50	90.02	103.04	69.82	97.60	37.51	72.07	233.57	160.70	74.93	27.40	14.80	40
65.17	96.86	66.85	165.26	188.10	160.41	183.56	47.14	138.95	421.73	299.89	106.84	99.80	20.29	
.03	.....	.03	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
.65	.....	.61	.....	.....	.58	.09	.....	.....	.....	.....	.....	3.26	.....	42
.22	.52	.23	.07	.11	.....	.09	.20	.90	.....	.....	.....	.....	.27	43–49
1.65	2.06	1.67	1.58	3.28	2.89	3.22	1.60	1.13	1.62	.....	.....	1.30	1.92	50
2.64	4.12	2.72	4.99	.79	.....	.66	.80	1.58	4.06	.....	3.54	.65	.27	51
5.37	4.38	5.32	4.53	7.01	1.15	6.05	6.22	2.94	6.49	30.71	1.01	11.09	1.78	52b
.02	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[1] 1.96	1.51	55
.06	.....	.06	.....	.23	.58	.28	.20	.....	.....	.....	.....	.....	.....	56
.16	.....	.15	.....	.11	.....	.09	.....	.45	.....	.....	.....	.....	.14	57
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58a
.11	.....	.10	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.14	58b
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59

[1] See p. 85.

TABLE VI.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	II. GENERAL DISEASES NOT INCLUDED ABOVE—continued.						
60a	Exophthalmic goiter	0.44	0.45	0.28	0.48	0.32	0.47
60ba	Goiter, simple	.37	.38	.28	.41	.....	.39
61–65	Other diseases of ductless glands	.11	.11	.07	.12	.....	.12
66	Alcoholism (acute or chronic)	7.08	7.38	1.33	8.14	2.21	7.84
67a	Chronic lead poisoning	.02	.02	.....	.02	.....	.02
68a	Drug addiction	.54	.57	.07	.61	.53	.61
68b	Chronic poisoning by other organic substances	.02	.02	.....	.03	.....	.03
69	Other general diseases	3.08	3.12	1.33	3.23	3.69	3.25
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGAN OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	.07	.07	.28	.06	.....	.06
71	Simple meningitis	.04	.04	.....	.04	.11	.04
72	Tabes dorsalis	.02	.02	.07	.02	.....	.02
73	Other diseases of the spinal cord	.09	.08	.07	.09	.....	.09
74	Cerebral hemorrhage, apoplexy	.05	.05	.21	.03	.21	.04
75a	Hemiplegia	.03	.03	.07	.03	.11	.03
75ba	Facial paralysis	.13	.13	.07	.14	.....	.13
75bb	Other paralyses without specified cause	.14	.13	.14	.14	.....	.13
76	Generaly paralysis of the insane	.19	.19	.28	.19	.21	.19
77a	Constitutional psychopathic state	1.61	1.67	.28	1.87	.21	1.78
77b	Mental deficiency	1.91	1.99	.....	2.23	.63	2.15
77c	Dementia præcox	2.01	2.06	.21	2.30	.53	2.21
77d	Psychasthenia	.14	.14	.70	.11	.....	.10
77e	Psychoneurosis	1.09	1.14	2.16	1.10	.21	1.06
77f	Psychosis, alcoholic	.24	.25	.07	.27	.21	.26
77g	Psychosis, manic depressive	.44	.45	.35	.48	.11	.46
77h	Other forms of mental alienation	.79	.81	.28	.83	1.37	.85
78	Epilepsy	1.84	1.91	.14	2.10	1.16	2.05
79	Convulsions (nonepileptic)	.16	.16	.....	.18	.11	.18
81	Chorea	.11	.11	.....	.12	.11	.12
82a	Hysteria and results (psychoses excepted)	1.57	1.63	.14	1.79	.84	1.74
82b	Neuralgia	1.34	1.34	1.26	1.35	1.26	1.35
82c	Neuritis	1.33	1.29	2.44	1.22	.84	1.20
84a	Neurasthenia	2.03	2.11	4.82	1.99	.42	1.91
84b	Neuro-circulatory asthenia	.23	.23	.21	.25	.....	.24
84c	Other diseases of the nervous system	3.84	3.97	1.40	4.22	3.16	4.17
	B. Organs of special sense.						
85	The eye and annexa	9.52	9.57	6.14	9.91	8.32	9.83
85a	Refractive error	1.37	1.41	.63	1.53	.32	1.47
85b	Trachoma	.37	.38	.14	.41	.21	.40
85c	Conjunctivitis (others)	3.54	3.53	2.58	3.65	2.74	3.61
85d	Iritis	.60	.59	.42	.57	1.26	.60
85e	Keratitis	.59	.59	.....	.66	.21	.64
85f	Eyelids, diseases of	.70	.71	.42	.76	.32	.74
85g	Eye and annexa, other diseases of	2.35	2.35	1.95	2.34	3.26	2.38
86	The ear and the mastoid process	8.65	8.94	3.91	9.61	4.00	9.32
86aa	Otitis media	6.88	7.15	3.07	7.65	3 58	7.44
86ab	Otitis externa	1.21	1.24	.56	1.35	.11	1.29
86ac	Defective hearing, cause not stated	.07	.07	.....	.08	.....	.08
86ad	Ear, other diseases of	.24	.24	.21	.25	.11	.25
86b	Mastoiditis	.24	.25	.07	.27	.21	.26

Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.50	0.26	0.49	0.13	0.90	0.58	0.85	0.80	.....	.....	.....	.....	.....	0.27	60a
39	.....	.37	.13	.45	.....	.38	1.00	0.45	1.62	3.07	.....	.....	.27	60ba
.12	.....	.12	.07	.23	.....	.19	.....	.23	.....	1.02	.....	.....	.....	61–65
6.58	2.19	6.34	14.59	17.53	2.31	15.04	7.82	12.20	26.76	21.49	0.51	1.30	.14	66
.01	.....	.01	.....	.23	.....	.19	.....	.....	.....	.....	.....	.....	.....	67a
.68	.64	.67	.33	.34	.....	.28	.20	.90	.....	.....	.51	.....	.....	68a
.03	.....	.03	.....	.....	.....	.....	.....	.....	.81	.....	.....	.....	.....	68b
3.40	4.12	3.44	3.02	2.60	1.73	2.46	2.21	.68	8.92	.....	2.03	7.83	1.10	69
.06	.....	.05	.07	.11	.....	.09	.....	.23	.....	.....	.....	.....	.....	70
.01	.13	.02	.13	.23	.....	.19	.....	.23	.....	.....	.....	.....	.....	71
.02	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.14	72
.11	.....	.10	.....	.11	.....	.09	.....	.....	.....	.....	.....	.65	.....	73
.03	.13	.03	.07	.11	.58	.19	.....	.....	.....	.....	.....	.....	.....	74
.03	.13	.03	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75a
.16	.....	.15	.13	.....	.....	.....	.....	.....	.....	1.02	.....	.65	.....	75ba
.13	.....	.12	.26	.11	.....	.09	.20	.23	.....	.....	.....	.....	.27	75bb
.21	.26	.21	.07	.11	.....	.09	.....	.45	.....	.....	.....	.....	.....	76
2.03	.13	1.93	1.12	1.58	.58	1.42	1.00	1.58	.81	.....	1.52	.....	.14	77a
2.44	.52	2.34	.66	2.60	1.15	2.36	3.21	.45	.....	1.02	1.01	.....	.14	77b
2.54	.52	2.43	1.18	1.24	.58	1.13	1.81	2.94	.81	.....	.51	1.96	.41	77c
.09	.....	.09	.07	.34	.....	.28	.20	.....	.....	1.02	.....	.....	.....	77d
1.04	.13	.99	.79	1.81	.58	1.61	3.21	.68	1.62	.....	.51	.....	.....	77e
.19	.13	.18	1.05	.45	.58	.47	.....	.....	.81	.....	.....	.....	.....	77f
.55	.13	.53	.26	.11	.....	.09	.20	.23	.....	.....	.....	.65	.14	77g
.85	1.55	.88	.39	1.24	.58	1.13	.40	1.13	.....	2.05	1.01	.65	.27	77h
2.42	1.42	2.37	1.38	1.13	.....	.95	.20	.23	.....	.....	.51	.....	.14	78
.23	.13	.22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
.12	.13	.13	.07	.....	.....	.....	.20	.45	.....	.....	.....	.....	.....	81
1.91	.77	1.85	1.38	.90	1.15	.95	1.60	2.49	.81	1.02	.51	1.30	.....	82a
1.49	1.42	1.49	.59	1.24	.58	1.13	.60	.90	1.62	.....	1.01	6.52	.27	82b
1.18	1.03	1.17	1.84	1.13	.....	.95	1.20	.68	1.62	1.02	.51	[1]13.05	.....	82c
1.90	.52	1.82	1.51	4.64	.....	3.88	2.01	2.26	2.43	.....	.....	.65	.14	84a
.22	.....	.21	.13	.90	.....	.76	.60	.....	.....	.....	.....	1.30	.....	84b
4.61	3.48	4.55	2.17	3.51	1.73	3.22	4.41	2.49	.81	5.12	1.01	1.30	.69	84c
9.53	7.04	9.41	7.29	9.73	12.69	10.21	29.49	11.52	12.16	13.31	2.03	20.87	5.62	85
1.07	.26	1.03	.20	2.04	.58	1.80	18.86	.45	.81	3.07	.....	1.96	.14	85a
.50	.26	.49	.07	.11	.....	.09	.....	.23	.....	.....	.....	.....	.....	85b
3.60	2.45	3.54	4.01	3.05	4.04	3.22	3.81	4.29	8.11	7.16	1.01	6.52	3.15	85c
.60	1.42	.64	.26	.45	.58	.47	.20	1.58	.....	.....	.51	2.61	.41	85d
.75	.26	.72	.33	.....	.....	.....	1.00	.23	.81	1.02	.....	1.30	.41	85e
.69	.13	.65	1.58	.45	1.15	.57	1.40	.68	.....	1.02	.....	.....	.55	85f
2.33	2.58	2.34	.85	3.62	6.35	4.07	4.21	4.07	2.43	1.02	.51	8.48	.96	85g
8.95	4.38	8.71	7.36	20.81	2.31	17.78	12.03	11.52	10.54	28.66	2.53	3.91	1.65	86
7.62	3.99	7.43	6.24	11.88	1.73	10.21	7.02	5.20	8.11	22.52	1.52	2.61	.96	86aa
.80	.13	.77	.39	7.80	.....	6.53	4.21	5.87	2.43	1.02	.51	.65	.55	86ab
.09	.....	.08	.....	.34	.....	.28	.....	.....	.....	.....	.....	.....	.....	86ac
.21	.....	.20	.13	.45	.58	.47	.80	.23	.....	5.12	.....	.65	.14	86ad
.24	.26	.24	.59	.34	.....	.28	.....	.23	.....	.....	.51	.....	.....	86b

[1] See page 85.

TABLE VI.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
87	Pericarditis	0.05	0.05	.....	0.06	.....	0.06
88	Endocarditis and myocarditis (acute)	.04	.04	.....	.04	0.11	.04
89	Angina pectoris	.07	.07	0.28	.06	.....	.06
90a	Valvular diseases of the heart	1.75	1.80	1.88	1.83	1 26	1.80
90aa	Aortic insufficiency	.14	.15	.14	.15	.21	.15
90ab	Aortic stenosis	.06	.05	.....	.06	.....	.05
90ac	Mitral insufficiency	1.20	1.25	1.54	1.25	.74	1.22
90ad	Mitral stenosis	.22	.23	.14	.25	.11	.24
90ae	Other valvular diseases	.12	.12	.07	.12	.21	.13
90b	Cardiac hypertrophy and dilatation	.23	.22	.14	.24	.11	.23
90c	Myocarditis, chronic	.40	.41	1.05	.35	.53	.36
90d	Other diseases of the heart (organic)	.18	.18	.07	.14	1.16	.19
91a	Aneurysm	.03	.03	.....	.02	.32	.04
91b	Arteriosclerosis	.19	.20	1.61	.08	.32	.09
91c	Other diseases of the arteries	.02	.02	.....	.02	.11	.02
92	Embolism and thrombosis (not cerebral)	.04	.04	.07	.03	.32	.04
93a	Hemorrhoids	5.51	5.73	5.65	5.54	9.37	5.73
93b	Varicocele	1.84	1.91	.42	2.13	.11	2.03
93c	Varicose veins	.60	.62	.70	.60	.84	.61
93d	Phlebitis	.13	.13	.49	.11	.11	.11
94	Diseases of the lymphatic system	4.65	4.56	.98	4.79	5.58	4.83
95	Hemorrhage without specified cause	.22	.22	.42	.20	.32	.20
96a	Cardiac arrhythmia	.17	.17	.35	.17	.....	.16
96b	Cardiac disorder, functional	.58	.61	.42	.66	.....	.62
96c	Tachycardia	1.07	1 11	.70	1.10	2.00	1.14
96d	Other diseases of the circulatory system	.19	.18	.14	.19	.11	.19
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa	26.56	27.52	33.08	27.63	6.42	27.09
97a	Deviation of nasal septum, and spurs	2.71	2.82	5.51	2.75	.11	2.61
97b	Turbinate hypertrophy	.29	.29	.49	.28	.11	.27
97c	Sinusitis	1.85	1.91	4.88	1.74	.63	1.68
97d	Rhinitis	19.92	20.62	16.96	21.18	5.16	20.90
97e	Nasal fossæ, other diseases of	1.80	1.88	5.23	1.69	.42	1.62
98	Diseases of the larynx	2.92	2.99	3.00	3.03	2.32	2.99
98a	Laryngitis, acute catarrhal	2.88	2.95	3.00	2.99	2.21	2.95
98b	Larynx, other diseases of	.04	.04	.....	.04	.11	.04
99	Bronchitis	65.84	66.27	60.50	68.27	37.80	66.72
100	Pneumonia, broncho	2.03	2.07	1.12	2.21	.95	2.14
101a	Pneumonia, lobar	2.38	2.35	.84	2.48	2.11	2.46
101b	Pneumonia, not otherwise defined	.02	.02	.....	.02	.....	.02
102a	Pleurisy, suppurative	.10	.10	.....	.10	.21	.11
102b	Pleurisy, serofibrinous	.63	.62	.56	.65	.21	.63
102c	Pleurisy, others	2.36	2.37	1.81	2.32	4.00	2.41
105	Asthma	1.47	1.47	1.05	1.52	1.26	1.50
107	Other diseases of the respiratory system	.20	.20	.28	.20	.21	.20
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).						
108a	Pyorrhea alveolaris	.33	.33	.84	.31	.11	.30
108b	Other diseases of the mouth and annexa	4.22	4.26	4.05	4.33	3.26	4.27
109a	Adenoid vegetation	.20	.20	.....	.23	.11	.22
109ba	Pharyngitis, acute catarrhal	19.83	20.40	11.86	21.89	5.58	21.06
109bb	Pharynx, other diseases of	5.92	6.17	2.16	6.68	2.63	6.47
109bc	Tonsillitis, acute, follicular	64.87	67.49	28.12	73.14	32.12	70.51
109bd	Tonsillitis, chronic	7.62	7.93	10.40	8.03	2.53	7.75
109be	Other diseases of the pharynx and tonsils	3.13	3.26	1.88	3.48	1.26	3.37
110	Diseases of the œsophagus	.01	.01	.....	.01	.....	.01
111a	Ulcer of the stomach	.23	.24	.35	.23	.21	.23

Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.07	.....	0.07	.....	0.11	.....	0.09	.....	.....	.....	.....	.....	.....	.....	87
.04	0.13	.04	0.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	88
.07	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	0.51	.....	.....	89
2.03	1.29	1.99	.59	2.15	1.15	1.99	1.20	0.23	3.24	2.05	.....	.....	0.55	90a
.16	.26	.16	.07	.23	.....	.19	.20	.....	.....	.....	.....	.....	.....	90aa
.06	.....	.06	.....	.....	.....	.....	.....	.....	.81	.....	.....	.....	.27	90ab
1.43	.77	1.40	.33	1.24	.58	1.13	.60	.23	.81	1.02	.....	.....	.27	90ac
.27	.13	.26	.13	.23	.....	.19	.....	.....	1.62	1.02	.....	.....	.....	90ad
.11	.13	.11	.07	.45	.58	.47	.40	.....	.....	.....	.....	.....	.....	90ae
.25	.....	.24	.07	.45	.58	.47	.20	.23	.....	.....	.....	.....	.41	90b
.34	.52	.35	.20	.68	.58	.66	.20	.45	2.43	.....	.....	1.30	.....	90c
.15	.26	.16	.26	.....	5.19	.85	.....	.....	.....	.....	.....	.....	.....	90d
.01	.39	.03	.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	91a
.06	.26	.07	.13	.45	.58	.47	.....	.....	.....	.....	.....	.....	.....	91b
.01	.13	.02	.....	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	91c
.03	.39	.05	.....	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	92
5.46	10.30	5.72	6.51	6.45	5.19	6.24	4.81	5.87	4.87	7.16	.....	1.30	.55	93a
2.05	.13	1.95	1.84	3.51	.....	2.93	2.01	4.97	.....	1.02	.....	.....	.27	93b
.63	.90	.65	.13	.90	.58	.85	1.20	.....	1.62	.....	.....	.....	.14	93c
.11	.....	.11	.20	.....	.58	.09	.....	.....	.....	.....	.....	.65	.....	93d
3.80	5.41	3.89	6.18	11.54	6.35	10.69	1.60	14.46	30.01	7.16	3.04	20.87	3.70	94
.23	.39	.24	.07	.....	.....	.....	.40	.....	.....	.....	.....	.....	.27	95
.11	.....	.10	.07	1.24	.....	1.04	.20	.....	.81	.....	.51	.....	.....	96a
.57	.....	.54	.07	2.60	.....	2.18	1.81	.....	3.24	.....	.....	.....	.....	96b
1.03	2.32	1.10	1.77	.90	.58	.85	1.20	1.58	.81	2.05	.....	.....	.27	96c
.20	.13	.20	.07	.34	.....	.28	.20	.....	.....	.....	.51	.65	.14	96d
28.87	6.44	27.69	25.48	20.25	6.35	17.97	33.30	24.17	12.98	11.26	.51	6.52	4.52	97
2.85	.13	2.71	.59	4.30	.....	3.59	6.02	2.26	1.62	.....	.....	.65	.14	97a
.24	.13	.23	.13	.90	.....	.76	1.00	.45	.....	.....	.....	.....	.27	97b
1.70	.64	1.64	1.58	2.26	.58	1.99	3.21	1.58	.....	4.09	.....	1.30	.27	97c
22.15	5.02	21.25	22.54	12.44	5.77	11.35	21.66	19.20	6.49	7.16	.51	4.57	3.84	97d
1.93	.52	1.86	.66	.34	.....	.28	1.40	.68	4.87	.....	.....	.....	.....	97e
3.06	2.70	3.04	3.88	1.24	.58	1.13	.80	1.36	8.11	18.42	.51	3.91	.69	98
3.02	2.58	2.99	3.88	1.24	.58	1.13	.80	1.36	8.11	18.42	.....	3.91	.69	98a
.04	.13	.05	.....	.....	.....	.....	.....	.....	.....	.....	.51	.....	.....	98b
64.57	41.48	63.34	101.32	46.26	21.35	42.18	58.38	64.16	69.74	401.23	41.52	191.13	27.42	99
1.90	1.03	1.85	3.15	1.58	.5	1.42	2.21	1.13	.81	41.96	3.04	.....	1.51	100
2.26	2.45	2.27	4.27	3.05	.58	2.65	.60	.68	8.11	7.16	4.56	3.91	3.02	101a
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	101b
.09	.26	.10	.....	.45	.....	.38	.....	.....	.....	1.02	.....	.....	.....	102a
.50	.13	.48	1.64	.90	.58	.85	1.00	1.13	1.62	.....	.51	.65	.82	102b
1.90	3.22	1.97	4.34	5.88	7.50	6.15	1.00	4.07	2.43	2.05	.51	1.30	2.47	102c
1.56	1.29	1.55	.53	1.36	1.15	1.32	4.81	.90	2.43	.....	.....	3.91	.96	105
.20	.....	.19	.07	.45	1.15	.57	.....	.45	.....	.....	.....	.....	.14	107
.29	.13	.29	.20	.45	.....	.38	.40	.23	.81	1.02	.51	.65	.14	108a
4.62	3.35	4.55	2.37	2.94	2.89	2.93	2.61	4.74	12.98	5.12	2.53	10.44	1.92	108b
.27	.13	.26	.....	.11	.....	.09	.20	.23	.....	.....	.....	.....	.....	109a
24.94	6.44	23.96	5.58	10.07	1.73	8.70	13.64	17.17	45.41	11.26	7.09	20.87	3.84	109ba
5.79	1.55	5.57	17.48	5.77	7.50	6.05	.20	3.39	20.28	16.38	.51	.....	.55	109bb
77.68	36.84	75.53	78.26	27.94	10.96	25.16	39.72	47.90	51.09	165.81	25.32	18.92	2.33	109bc
8.48	1.55	8.11	4.53	9.61	6.92	9.17	10.23	4.29	8.11	2.05	1.52	1.30	.27	109bd
3.32	1.03	3.20	5.52	3.17	2.31	3.03	1.81	1.58	4.87	17.40	1.01	.....	.14	109be
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	110
.22	.26	.22	.46	.....	.....	.....	.....	.90	.....	.....	.....	.....	.....	111a

TABLE VI.—*Admissions, United State*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED)—continued.						
111b	Ulcer of the duodenum	0.11	0.12	0.63	0.08	.....	0.08
112	Other diseases of the stomach (cancer excepted).	12.53	12.58	10.47	12.69	13.79	12.75
114a	Diarrhea (cause not stated)	4.02	4.08	4.68	3.93	5.90	4.03
114b	Enteritis and colitis	8.54	8.13	9.84	8.19	4.42	8.00
115	Ankylostomiasis	2.12	1.74	.....	1.95	.63	1.88
116	Other intestinal parasites	.95	.72	.63	.68	1.58	.73
117	Appendicitis, and typhlitis	7.94	8.21	7.40	8.17	10.11	8.27
118a	Hernia	6.35	6.57	7.33	6.65	4.00	6.51
118b	Intestinal obstruction	.18	.18	.42	.16	.11	.16
119a	Fistula in ano	.50	.50	.42	.50	.63	.50
119b	Other diseases of the intestines	33.43	32.35	22.26	32.74	40.22	33.12
123	Biliary calculi	.04	.04	.14	.03	.....	.03
124a	Cholecystitis	.77	.80	.91	.77	1.05	.79
124b	Other diseases of the liver	1.86	1.90	1.26	1.99	1.37	1.95
127	Other diseases of the digestive system	.64	.66	.49	.68	.63	.68
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	.20	.19	.35	.18	.32	.18
129	Chronic nephritis	.74	.75	2.86	.59	.53	.59
131a	Pyogenic infection of the kidney	.32	.33	.91	.30	.11	.29
131b	Other diseases of the kidney and annexa	.49	.51	1.61	.42	.53	.42
132a	Nephrolithiasis	.26	.27	.77	.24	.11	.23
132b	Vesical calculi	.06	.06	.28	.05	.11	.05
133a	Cystitis	.93	.95	.70	.92	1.90	.97
133b	Other diseases of the bladder	.29	.30	.....	.32	.32	.32
134a	Stricture of the urethra (nonvenereal)	.11	.11	.28	.08	.42	.10
134b	Urethritis (nonvenereal)	1.52	1.57	.14	1.74	.63	1.68
135	Diseases of the prostate	.17	.18	.42	.16	.11	.16
136a	Balanitis	.79	.81	.....	.89	.53	.87
136b	Epididymitis	.60	.59	.28	.62	.42	.61
136c	Hydrocele	.64	.64	.42	.66	.53	.65
136d	Warts, external genital organs	.60	.62	.14	.65	.84	.66
136e	Other nonvenereal diseases of the male genital organs.	1.25	1.22	.35	1.24	2.11	1.29
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152a	Carbuncle	1.07	1.07	1.61	1.07	.21	1.03
152b	Furuncle	12.39	12.53	5.09	13.58	4.21	13.10
153a	Acute abscess	6.47	6.40	1.67	6.85	5.16	6.77
153b	Cellulitis	7.19	7.12	2.86	7.68	3.16	7.44
154a	Trichophytosis	3.78	3.45	.70	3.71	2.84	3.67
154b	Nails, defects and diseases of	4.07	4.13	.49	4.55	1.90	4.41
154c	Ectoparasites	1.33	1.39	.07	1.56	.11	1.49
154d	Eczema	1.79	1.80	.98	1.94	.53	1.87
154e	Erythema	.32	.33	.07	.37	.....	.35
154f	Herpes	1.29	1.31	.42	1.43	.53	1.38
154g	Impetigo	1.42	1.47	.21	1.65	.11	1.57
154h	Psoriasis	.31	.32	.28	.32	.11	.31
154i	Scabies	16.34	16.99	1.19	19.12	1.05	18.20
154j	Other diseases of the skin and cellular tissue	6.71	6.88	1.67	7.43	4.42	7.28

Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.09	.....	0.09	.....	.....	.....	.....	.....	0.45	.....	.....	.....	.....	.....	111b
11.96	12.88	12.01	13.93	22.62	17.89	21.85	13.04	15.82	12.17	3.07	7.09	24.79	8.50	112
3.51	2.70	3.46	3.75	10.52	20.20	12.11	.40	.90	32.44	7.16	2.03	.....	3.29	114a
7.64	5.28	7.51	6.83	18.78	.58	15.79	14.44	6.33	9.73	.....	1.52	76.32	5.48	114b
2.30	.39	2.20	.07	1.70	1.73	1.70	1.60	.....	.....	.....	.....	3.91	11.93	115
.54	.....	.51	.59	2.94	8.66	3.88	.40	1.13	3.24	.....	.....	.65	7.27	116
8.11	10.30	8.22	4.86	13.46	9.23	12.77	11.03	13.78	4.87	.....	1.01	2.61	1.65	117
6.78	4.51	6.66	6.05	7.13	1.73	6.24	6.62	6.78	6.49	4.09	.51	4.57	.69	118a
.19	.13	.19	.....	.11	.....	.09	.....	.23	.....	.....	.....	.....	.14	118b
.52	.77	.54	.79	.11	.....	.09	.20	.23	.....	.....	.....	.....	.55	119a
32.98	40.71	33.38	5.26	73.18	38.08	67.43	31.70	48.12	47.85	14.33	14.68	54.79	58.81	119b
.04	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	123
.69	.64	.69	.59	2.60	2.89	2.65	.....	1.13	.81	1.02	1.01	.65	.14	124a
1.41	1.55	1.42	6.77	3.62	.58	3.12	.40	2.49	2.43	1.02	1.52	3.26	.41	124b
.65	.52	.65	.85	.90	1.15	.95	1.00	.45	.....	1.02	.....	.65	.....	127
.17	.26	.18	.26	.11	.58	.19	.....	.45	.....	.....	.....	.....	.41	128
.66	.52	.65	.20	.34	.58	.38	1.00	.23	.81	.....	.....	.....	.69	129
.18	.13	.18	.33	.34	.....	.28	1.00	3.16	.....	1.02	.....	.....	.....	131a
.32	.64	.34	.72	79	.....	.66	1.00	1.36	.....	.....	.....	.....	.14	131b
.25	.13	.25	.20	.....	.....	.....	.60	.....	.....	.....	.51	.....	.....	132a
.06	.....	.05	.....	.....	.58	.09	.....	.....	.....	.....	.....	.....	.....	132b
.85	1.80	.90	.66	1.13	2.31	1.32	2.41	1.81	3.24	.....	.....	1.30	.41	133a
.34	.26	.34	.20	.57	.58	.57	.....	.23	.....	.....	.....	.65	.....	133b
.06	.52	.09	.13	.11	.....	.09	.....	.23	.....	.....	.51	.65	.....	134a
1.57	.64	1.52	3.02	3.51	.58	3.03	1.60	.....	.....	1.02	1.01	.65	.41	134b
.17	.....	.16	.07	.34	.58	.38	.....	.45	.....	.....	.....	.....	.....	135
.95	.64	.93	.20	1.58	.....	1.32	1.00	.....	.81	3.07	.....	1.30	.....	136a
.55	.39	.54	.72	.68	.58	.66	.20	1.58	1.62	5.12	.51	1.30	.82	136b
.66	.39	.65	.66	.68	1.15	.76	1.00	.90	.....	.....	.....	2.61	.14	136c
.48	.64	.49	.85	2.60	1.73	2.46	1.20	.45	2.43	1.02	.....	.....	.....	136d
1.26	2.32	1.31	.99	1.13	1.15	1.13	1.20	.68	1.62	8.19	.51	4.57	1.37	136e
.85	.26	.82	3.09	1.70	.....	1.42	.80	.45	.81	1.02	.51	2.61	.82	152a
12.91	4.51	12.46	23.26	7.13	2.89	6.43	22.07	12.88	8.92	5.12	2.53	24.79	5.89	152b
6.77	4.77	6.66	6.37	8.94	6.92	8.61	7.62	10.39	5.68	.....	1.52	22.83	4.80	153a
6.44	3.86	6.30	16.43	10.07	.....	8.42	15.25	7.00	4.06	4.09	3.04	32.62	3.84	153b
3.05	.90	2.94	.53	16.29	11.54	15.51	11.43	3.84	3.24	1.02	.....	1.30	13.30	154a
4.17	2.06	4.06	3.88	5.54	1.15	4.82	14.44	8.81	2.43	2.05	.....	1.96	2.74	154b
1.85	.13	1.76	.46	.23	.....	.19	1.20	.....	2.43	.....	.....	.....	.....	154c
1.75	.52	1.69	2.76	3.05	.58	2.65	3.21	2.03	.....	4.09	.51	5.87	.55	154d
.38	.....	.36	.20	.45	.....	.38	.20	.68	.....	.....	.51	.....	.....	154e
1.32	.52	1.27	1.51	2.04	.58	1.80	2.41	2.26	2.43	3.07	.....	.....	1.10	154f
1.30	.13	1.24	5.39	1.24	.....	1.04	1.60	1.81	.....	1.02	.....	.65	.14	154g
.32	.13	.31	.59	.11	.....	.09	.40	.....	.....	.....	.....	.65	.14	154h
20.12	1.03	19.14	31.87	3.17	1.15	2.84	8.22	1.13	10.54	3.07	1.01	1.96	1.51	154i
7.14	4.51	7.00	8.02	12.10	4.04	10.78	10.23	6.78	1.62	6.14	1.01	5.22	2.47	154j

TABLE VI.—*Admissions, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored	Total.
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155a	Osteomyelitis	0.22	0.23	0.07	0.25	0.11	0.24
155b	Other diseases of the bone	.46	.45	.35	.46	.53	.46
155c	Fracture, faulty union of	.44	.45	.....	.50	.32	.49
156a	Ankylosis of joints	.19	.20	.14	.21	.11	.20
156b	Other diseases of the joints	.75	.76	.21	.75	1.68	.80
158a	Hallux valgus	.42	.43	.28	.45	.32	.45
158b	Myositis	.87	.87	.56	.89	.84	.89
158c	Pes planus	3.41	3.55	.35	3.86	2.63	3.79
158d	Tenosynovitis	.45	.46	.07	.51	.21	.49
158e	Other diseases of the organs of locomotion	6.84	7.01	4.26	7.26	6.53	7.22
	XI. MALFORMATION.						
159	Congenital malformations	.60	.61	.35	.64	.32	.63
	XV. ILL-DEFINED DISEASES.						
204–205	Not specified or ill-defined	32.83	33.46	19.05	34.50	35.80	34.57
	Total for diseases	706.79	717.62	407.12	753.47	518.58	741.50
	XIV. EXTERNAL CAUSES.						
165–174	Suicides (all)	.30	.30	.42	.31	.11	.30
	Accidental traumatisms	63.11	64.45	30.15	67.41	61.07	67.09
175	Poisoning by food	1.09	1.14	1.26	1.15	.74	1.13
176–177	Other acute poisonings (gas excepted)	.71	.74	.28	.75	1.26	.77
178	Conflagrations	.06	.06	.....	.07	.....	.06
179	Burns (conflagrations excepted)	.58	.60	.28	.63	.53	.63
180	Mechanical suffocation	.02	.02	.07	.02	.....	.02
181	Absorption of irrespirable or poisonous gas	.12	.12	.....	.14	.....	.13
182	Drowning	.32	.33	.21	.35	.21	.34
183	Firearms (wounds of war excepted)	3.26	3.32	.91	3.43	4.84	3.51
184	Cutting and piercing instruments	9.99	10.08	1.95	10.79	9.27	10.71
185	Fall	21.23	21.58	11.58	22.45	20.43	22.34
187	Machines	.85	.87	.07	.96	.42	.93
188a	Railroad accident	.28	.29	.21	.30	.32	.30
188b	Street car accident	.32	.33	.07	.37	.....	.35
188c	Automobile accident	5.15	5.33	4.19	5.58	2.42	5.42
188d	Balloon and airplane accident	.97	1.01	2.93	.91	.....	.86
188ea	Motor cycle accident	3.52	3.66	1.74	3.94	1.26	3.81
188eb	Other vehicles	4.97	5.07	.77	5.49	3.79	5.40
188fb	Other crushings	3.84	3.98	1.19	4.20	4.00	4.19
189	Animals (not poisonous)	5.84	5.93	2.44	5.90	11.58	6.19
193	Excessive cold	.17	.18	.07	.19	.11	.19
194	Excessive heat	.69	.72	.14	.79	.21	.76
195–196	Accidental electric shocks	.10	.09	.14	.09	.11	.09
197–199	Homicide (all)	.06	.05	.....	.05	.21	.06
202	Other external violence (cause specified)	17.03	17.11	3.98	18.50	10.84	18.12
202a	Falling objects	5.13	5.14	.84	5.56	3.90	5.47
202b	Jumping from height	.81	.79	.28	.84	.63	.83
202d	Splinters	.50	.52	.....	.56	.53	.56
202e	Other causes	10.59	10.65	2.86	11.54	5.79	11.25
203	Other external violence (cause not specified)	42.45	43.31	22.33	45.54	33.48	44.93
203a	Athletic exercises	17.37	17.74	10.54	18.60	12.64	18.30
203b	Drilling and marching	1.84	1.83	1.74	1.75	3.47	1.84
203c	Fighting (brawls)	3.72	3.83	.07	4.16	3.37	4.12
203d	Other causes	19.51	19.91	9.98	21.04	14.00	20.68
	Total for diseases	706.79	717.62	407.12	753.47	518.58	741.50
	Total for external causes	123.90	126.22	57.22	132.90	106.14	131.53
	Grand total	830.69	843.84	464.34	886.37	624.72	873.03

Army. 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	910,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.26	0.13	0.25	0.33	0.11	.....	0.09	.....	0.23	.....	.....	0.51	.....	.....	155a
.50	.52	.50	.26	.23	0.58	.28	0.40	.45	0.81	.....	.51	3.26	0.14	155b
.47	.39	.47	.53	.90	.....	.76	.60	.23	.....	02.05	.....	.65	.....	155c
.19	.13	.18	.....	.23	.....	.19	1.40	.....	.81	1.02	.....	.....	.....	156a
.71	2.06	.78	1.12	.68	.....	.57	1.40	.68	.....	.....	.51	.65	.55	156b
.42	.39	.42	.53	.11	.....	.09	.20	.....	7.30	3.07	.....	.65	.....	158a
.88	1.03	.88	.72	1.81	.....	1.51	1.60	.23	.....	.....	.....	.....	1.10	158b
3.61	3.22	3.59	2.83	11.54	.....	9.65	5.02	2.03	.....	.....	.....	.....	.27	158c
.42	.26	.42	1.64	.45	.....	.38	.20	.23	.....	.....	.....	.65	.....	158d
7.74	7.08	7.70	3.81	5.66	4.04	5.39	10.23	6.78	7.30	6.14	1.01	9.13	1.65	158e
.65	.39	.63	.66	.45	.....	.38	.80	.90	1.62	.....	.....	.....	.55	159
34.49	30.79	34.30	23.65	57.12	58.28	57.31	40.12	14.46	19.48	98.26	25.82	18.92	18.37	204–205
728.69	506.96	716.97	790.66	1134.15	570.69	1041.80	590.97	703.34	1085.15	1601.84	405.06	956.29	356.55	
.27	.....	.26	.59	.23	.58	.28	.60	.45	.....	.....	.....	.65	.....	165–174
68.32	59.25	67.84	68.86	54.06	69.24	56.55	87.46	74.78	28.39	63.46	11.14	60.02	27.00	
.45	.....	.43	.07	13.80	4.04	12.20	.60	3.16	.....	.....	.....	.....	.....	175
.73	1.55	.77	.99	.57	.....	.47	.40	1.36	.....	1.02	1.01	.....	.14	176–177
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	8.19	.....	.....	.....	178
.72	.26	.69	.20	.11	1.73	.38	.40	1.13	.....	1.02	.....	.....	.14	179
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	180
.11	.....	.11	.26	.11	.....	.09	.60	.....	.....	.....	.....	.....	.14	181
.28	.13	.27	.39	1.13	.58	1.04	.20	.90	.81	.....	.....	.....	.....	182
3.57	5.54	3.68	3.09	2.04	1.73	1.99	4.61	2.49	1.62	8.19	.51	3.91	1.37	183
10.90	9.66	10.84	12.29	5.99	7.50	6.24	14.24	13.56	4.87	8.19	2.53	19.57	5.25	184
22.15	19.58	22.01	25.76	19.68	24.24	20.43	26.48	29.15	16.22	26.61	7.09	27.40	10.42	185
1.06	.52	1.03	.66	.34	.....	.28	1.20	.45	.....	1.02	.....	1.30	.27	187
.30	.26	.30	.53	.11	.58	.19	.....	.23	.....	1.02	.....	.....	.....	188a
.41	.....	.39	.26	.34	.....	.28	.20	.....	.....	.....	.....	.....	.14	188b
6.14	2.58	5.95	4.31	1.81	1.73	1.80	5.62	4.29	.81	2.05	.....	1.30	.96	188c
1.07	.....	1.01	.13	.45	.....	.38	.60	.68	.....	.....	.....	.....	.....	188d
3.82	1.29	3.69	6.64	2.04	1.15	1.89	5.82	3.62	.81	.....	.....	.65	.27	188ea
6.05	4.38	5.96	4.73	1.70	1.15	1.61	4.41	3.62	.....	3.07	.....	2.61	2.74	188eb
4.37	3.48	4.32	3.35	2.04	6.35	2.74	7.82	4.74	2.43	3.07	.....	1.30	.69	188fb
6.13	10.05	6.34	5.19	1.81	18.47	4.54	14.24	5.42	.81	.....	.....	1.96	4.39	189
.17	.13	.16	.....	.11	.....	.09	.20	.....	.....	8.19	.51	.....	.....	193
.83	.26	.80	.66	.45	.....	.38	.80	1.13	.81	.....	.....	.....	.14	194
.09	.13	.09	.07	.23	.....	.19	.20	.....	.....	.....	.....	.....	.14	195–196
.03	.26	.04	.26	.....	.....	.....	.....	.23	.....	.....	.....	.65	.....	197–199
18.43	10.43	18.01	24.25	15.04	12.69	14.66	22.47	16.04	8.11	10.24	1.01	26.09	13.02	202
5.97	3.86	5.86	3.55	3.39	4.04	3.50	8.02	5.42	.81	3.07	.....	7.18	4.39	202a
.89	.77	.88	.59	.79	.....	.66	1.00	.68	.....	1.02	.....	1.96	.96	202b
.59	.64	.59	.46	.45	.....	.38	1.20	.....	.....	.....	.....	.....	.....	202d
10.98	5.15	10.67	19.65	10.41	8.66	10.12	12.24	9.94	7.30	6.14	1.01	16.96	7.68	202e
43.98	32.20	43.36	56.50	43.77	39.24	43.03	62.99	61.68	29.20	40.94	11.14	52.18	16.45	203
19.00	13.27	18.70	19.32	10.52	9.81	10.40	25.08	24.63	11.35	3.07	3.54	24.13	5.62	203a
1.72	2.96	1.78	1.64	2.60	5.77	3.12	3.01	1.13	.81	1.02	.....	3.91	1.78	203b
3.28	2.96	3.26	11.43	6.45	5.19	6.24	4.21	3.39	3.24	6.14	1.01	.65	1.51	203c
19.99	13.01	19.62	24.11	24.21	18.47	23.26	30.69	32.54	13.79	30.71	6.58	23.48	7.54	203d
728.69	506.96	716.97	790.66	1134.15	570.69	1041.80	590.97	703.34	1085.15	1601.84	405.06	956.29	356.55	
132.13	102.65	130.57	151.19	113.90	121.75	115.17	174.72	154.32	66.50	122.83	23.80	139.60	56.75	
860.82	609.61	847.54	941.85	1248.05	692.45	1156.98	765.70	857.66	1151.66	1724.67	428.86	1095.90	413.30	

TABLE VI.—*Admissions, United States*

Office classification numbers.	Disease.	Total United States Army.					
	Mean strength	209,565	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	XIV. EXTERNAL CAUSES—continued.						
	The following are included above:						
	Diagnoses of injuries—						
1	Abrasions and blisters	9.26	9.24	3.42	10.03	3.47	9.69
2	Anaphylaxis	.10	.10	.....	.11	.....	.11
3	Concussion (brain)	.70	.72	.84	.72	.53	.71
4	Contusion	14.94	15.15	4.75	16.16	12.00	15.95
5	Crushing	.39	.40	.77	.38	.21	.38
6	Dermatitis	2.73	2.83	1.67	3.07	.11	2.91
7	Dislocation of joint	1.83	1.87	1.67	1.90	1.68	1.89
8	Dislocation of articular cartilage of knee	.15	.15	.14	.16	.....	.15
9	Epiphyseal separation	.13	.14	.07	.15	.11	.14
10	Eye and annexa, traumatisms	1.07	1.07	.70	1.07	1.58	1.09
11	Foreign body	.80	.82	.07	.89	.63	.88
12	Fracture, simple	13.92	14.32	9.56	15.17	5.69	14.69
13	Fracture, compound	1.91	1.95	.84	2.05	1.90	2.04
14	Fracture, faulty union	.03	.03	.....	.03	.11	.04
15	Hemorrhage, and results	.18	.18	.14	.20	.....	.19
16	Secondary result of injuries	.54	.55	.49	.57	.42	.56
17	Sprain of joint	20.88	21.22	10.47	22.04	22.11	22.05
18	Strain	4.01	4.08	2.72	4.22	3.47	4.19
19	Synovitis, traumatic, cause not specified	1.17	1.21	.70	1.28	.74	1.25
20	Wounds, multiple	.96	1.00	.70	1.05	.42	1.02
21	Wounds, penetrating	.82	.84	.42	.82	1.79	.87
22	Wounds, perforating	1.36	1.39	.49	1.46	1.47	1.46
23	Wounds, others	35.09	35.69	10.89	37.47	39.80	37.60

Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Office classification numbers.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.		
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
9.15	2.06	8.77	21.03	6.33	9.81	6.90	12.44	9.49	8.11	9.21	.....	23.48	6.72	1
.13	.....	.12	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
.75	.64	.75	.46	.34	.....	.28	1.81	.90	.....	.....	.....	.65	.....	3
17.56	10.30	17.17	9.07	5.77	19.62	8.04	30.49	14.01	3.24	3.07	2.53	34.57	5.07	4
.37	.13	.35	.72	.11	.58	.19	.....	.68	.....	1.02	.51	.....	.14	5
3.16	.13	3.00	1.05	2.26	.....	1.89	6.82	4.29	2.43	2.05	4.05	.....	.55	6
1.90	1.42	1.88	2.23	1.13	2.89	1.42	2.61	2.03	.81	3.07	.51	1.30	.69	7
.17	.....	.16	.26	.11	.....	.09	.....	.....	.....	.....	.....	.65	.....	8
.14	.13	.14	.13	.23	.....	.19	.60	.....	.....	.....	.....	.....	.....	9
1.09	1.55	1.12	.59	1.58	1.73	1.61	1.40	1.36	.81	.....	.....	.....	1.37	10
.88	.77	.88	.72	1.58	.....	1.32	1.20	.68	.81	.....	.....	1.30	.....	11
14.01	5.41	13.56	26.08	10.07	6.92	9.55	26.28	21.46	1.62	12.28	3.54	8.48	3.84	12
1.77	2.19	1.80	4.27	1.81	.58	1.61	2.61	2.49	.81	7.16	1.01	.65	.96	13
.04	.13	.04	.....	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	14
.15	.....	.14	.33	.34	.....	.28	.20	.90	.....	1.02	.....	.....	.14	15
.55	.52	.55	.59	.90	.....	.76	.60	.23	1.62	.....	.....	.65	.14	16
22.32	22.67	22.34	20.96	19.00	19.62	19.10	30.69	23.95	21.09	14.33	2.53	21.53	11.38	17
4.46	2.96	4.38	2.10	5.09	5.77	5.20	5.42	3.84	1.62	2.05	.51	5.87	1.51	18
1.09	.90	1.08	3.42	.11	.....	.09	1.81	.45	.....	10.24	.....	.65	.14	19
.92	.52	.90	1.91	1.47	.....	1.23	1.81	.90	1.62	1.02	.....	.....	.14	20
.78	1.93	.84	1.45	.45	1.15	.57	2.01	.23	.....	.....	.....	.....	.41	21
1.39	1.80	1.42	2.89	.45	.....	.38	1.20	1.81	.81	1.02	.....	.65	.69	22
38.56	39.67	38.64	40.54	26.92	40.39	29.13	32.50	42.03	17.84	27.64	4.56	34.57	18.92	23

TABLE VII.—*Deaths, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	1	1	.....	1	.....	1
2	Typhus fever	5	5	1	4	.....	4
5a	Malarial fever, estivo-autumnal	1	1	.....	1	.....	1
6	Smallpox	2	2	.....	2	.....	2
7	Measles	28	28	.....	28	.....	28
8	Scarlet fever	6	6	.....	6	.....	6
10	Diphtheria	3	3	.....	3	.....	3
11	Influenza	162	161	5	151	5	156
11a	Influenza, with pneumonia	151	150	3	144	3	147
11b	Influenza, without pneumonia	11	11	2	7	2	9
16	Dysentery	2	2	.....	2	.....	2
24	Meningococcus meningitis	9	9	.....	9	.....	9
25cf	Other epidemic diseases	5	5	.....	5	.....	5
31	Tuberculosis of the respiratory system	227	225	16	158	51	209
32–36	Tuberculosis of the other organs	29	28	1	21	6	27
37	Disseminated tuberculosis	13	13	.....	11	2	13
	Tuberculosis (all)	269	266	17	190	59	249
38	Syphilis	10	10	1	8	1	9
	Venereal diseases (all)	10	10	1	8	1	9
41	Purulent infection, septicemia	1	1	.....	1	.....	1
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	29	28	10	17	1	18
50	Benign tumors	5	5	.....	5	.....	5
55	Beriberi	1	.....	.....	.....	.....	.....
57	Diabetes mellitus	2	2	.....	2	.....	2
61–65	Other diseases of ductless glands	2	2	1	1	.....	1
69	Other general diseases	5	5	1	4	.....	4
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	4	4	.....	4	.....	4
71	Simple meningitis	6	6	1	4	1	5
73	Other diseases of the spinal cord	1	1	.....	1	.....	1
74	Cerebral hemorrhage, apoplexy	8	8	3	4	1	5
76	General paralysis of the insane	4	4	.....	2	2	4
77f	Psychosis, alcoholic	2	2	.....	2	.....	2
77h	Other forms of mental alienation	4	3	.....	3	.....	3
78	Epilepsy	2	2	1	1	.....	1
84c	Other diseases of the nervous system	7	7	.....	7	.....	7
	B. Organs of special sense.						
86	The ear and the mastoid process (all)	11	11	.....	9	2	11
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
88	Endocarditis and myocarditis (acute)	4	4	.....	4	.....	4
89	Angina pectoris	4	4	2	2	.....	2
90a	Valvular diseases of the heart	16	16	5	7	4	11
90ac	Mitral insufficiency	11	11	3	6	2	8
90ae	Other valvular diseases	5	5	2	1	2	3
90b	Cardiac hypertrophy and dilatation	12	9	1	8	.....	8
90c	Myocarditis, chronic	13	13	2	9	2	11
90d	Other diseases of the heart (organic)	5	5	.....	5	.....	5
91c	Other diseases of the arteries	4	4	1	2	1	3
92	Embolism and thrombosis (not cerebral)	4	4	1	1	2	3
94	Diseases of the lymphatic system	1	1	.....	1	.....	1
95	Hemorrhage without specified cause	5	5	1	4	.....	4

Army, 1920; absolute numbers.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	5a
1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	6
15	.....	15	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
2	.....	2	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	8
1	.....	1	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	10
124	5	129	18	.....	.....	.....	1	1	.....	2	5	.....	1	11
118	3	121	17	.....	.....	.....	1	1	.....	2	5	.....	1	11a
6	2	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11b
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
8	.....	8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
2	.....	2	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	25c f
129	48	177	16	3	3	6	1	1	2	6	.....	.....	2	31
15	5	20	4	1	1	2	1	.....	.....	.....	.....	.....	1	32–36
6	1	7	3	.....	1	1	.....	.....	.....	2	.....	.....	.....	37
150	54	204	23	4	5	9	2	1	2	8	.....	.....	3	
3	.....	3	4	1	1	2	.....	.....	.....	.....	.....	.....	.....	38
3	.....	3	4	1	1	2	.....	.....	.....	.....	.....	.....	.....	
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
17	1	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	43–49
5	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	55
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61–65
2	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
3	.....	3	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	70
1	1	2	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	71
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
2	1	3	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	74
2	2	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77f
1	.....	1	1	1	.....	1	.....	.....	.....	.....	.....	1	.....	77h
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
5	.....	5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84c
8	2	10	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
5	4	9	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90a
4	2	6	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90ac
1	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90ae
7	.....	7	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	3	90b
5	2	7	1	1	.....	1	.....	.....	2	.....	.....	.....	.....	90c
5	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90d
2	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91c
1	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
3	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95

TABLE VII.—*Deaths, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa (all).	8	8	3	5	.....	5
97c	Sinusitis	6	6	2	4	.....	4
97e	Nasal fossæ, other diseases of	2	2	1	1	.....	1
98	Diseases of the larynx (all)	2	2	.....	2	.....	2
100	Pneumonia, broncho	73	71	5	65	1	66
101a	Pneumonia, lobar	107	105	4	97	4	101
101b	Pneumonia, not otherwise defined	4	4	.....	4	.....	4
102c	Pleurisy, others	7	7	1	6	.....	6
105–107	Other diseases of the respiratory system	4	4	.....	4	.....	4
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).						
109bc	Tonsillitis, acute, follicular	6	6	1	5	.....	5
109be	Other diseases of the pharynx and tonsils	2	2	.....	2	.....	2
111a	Ulcer of the stomach	6	6	2	4	.....	4
111b	Ulcer of the duodenum	2	2	1	1	.....	1
117	Appendicitis, and typhlitis	23	22	3	17	2	19
118a	Hernia	3	3	.....	3	.....	3
118b	Intestinal obstruction	5	5	.....	4	1	5
119b	Other diseases of the intestines	6	6	1	5	.....	5
127	Other diseases of the digestive system	4	4	1	1	2	3
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	5	5	.....	4	1	5
129	Chronic nephritis	23	23	3	12	8	20
131a	Pyogenic infection of the kidney	3	3	.....	3	.....	3
136e	Other nonvenereal diseases of the male genital organs.	3	3	1	1	1	2
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152	Furuncle	5	5	2	3	.....	3
153	Acute abscess	5	5	.....	4	1	5
154j	Other diseases of the skin and cellular tissue	3	3	.....	3	.....	3
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155c	Fractures, faulty union of	1	1	.....	1	.....	1
	XI. MALFORMATION.						
159	Congenital malformations	1	1	.....	1	.....	1
	XV. ILL-DEFINED DISEASES.						
204–205	Not specified or ill-defined	3	3	.....	3	.....	3
	Total for diseases	979	964	82	780	102	882
	Total for diseases (excluding deaths for cases admitted prior to 1920).	716	702	57	584	61	645

Army, 1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
4	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	97
3	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	97c
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	97e
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	98
40	.....	40	8	5	1	6	2	1	1	5	3	.....	2	100
77	3	80	11	1	1	2	.....	.....	2	4	2	2	.....	101a
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	101b
3	.....	3	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	102c
2	.....	2	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	105–107
2	.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109bc
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	109be
2	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111a
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111b
12	2	14	3	1	.....	1	.....	.....	1	.....	.....	.....	1	117
2	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	118a
3	1	4	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	118b
5	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119b
1	1	2	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	127
3	.....	3	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	128
11	7	18	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	129
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	131a
1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	136e
3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	152
4	.....	4	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	153
2	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	154j
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	155c
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	159
3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	204–205
584	90	674	113	21	12	33	7	5	10	27	13	3	12	
446	49	495	67	21	12	33	5	5	10	18	12	2	12	

TABLE VII.—*Deaths, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	XIV. EXTERNAL CAUSES.						
165–174	Suicides (all)	64	63	6	56	1	57
	Accidental traumatisms:	355	352	33	309	10	319
175	Poisoning by food	1	1	.....	1	.....	1
176–177	Other acute poisonings (gas excepted)	21	21	1	20	.....	20
178	Conflagrations	5	5	.....	5	.....	5
179	Burns (conflagrations excepted)	1	1	.....	1	.....	1
180	Mechanical suffocation	2	2	.....	2	.....	2
181	Absorption of irrespirable or poisonous gas	3	3	.....	3	.....	3
182	Drowning	65	65	3	60	2	62
183	Firearms (wounds of war excepted)	79	78	2	69	7	76
184	Cutting and piercing instruments	7	7	.....	7	.....	7
185	Fall	21	21	1	20	.....	20
187	Machines	2	2	.....	2	.....	2
188a	Railroad accident	21	21	.....	20	1	21
188b	Street-car accident	6	6	.....	6	.....	6
188c	Automobile accident	26	26	4	22	.....	22
188d	Balloon and airplane accident	43	43	21	22	.....	22
188ea	Motor-cycle accident	17	16	.....	16	.....	16
188eb	Other vehicles	25	24	.....	24	.....	24
188fb	Other crushings	5	5	1	4	.....	4
189	Animals (not poisonous)	5	5	.....	5	.....	5
196	Accidental electric shocks	2	2	.....	2	.....	2
197–199	Homicide (all)	13	12	.....	10	2	12
202	Other external violence (cause specified)	20	20	3	17	.....	17
202a	Falling objects	2	2	1	1	.....	1
202e	Other causes	18	18	2	16	.....	16
203	Other external violence (cause not specified)	15	15	1	12	2	14
203a	Athletic exercises	6	6	1	4	1	5
203c	Fighting (brawls)	1	1	.....	.....	1	1
203d	Other causes	8	8	.....	8	.....	8
	Total for diseases	979	964	82	780	102	882
	Total for external causes	469	464	43	406	15	421
	Grand total	1,448	1,428	125	1,186	117	1,303
	Excluding deaths for cases admitted prior to 1920:						
	Total for diseases	716	702	57	584	61	645
	Total for external causes	458	453	40	398	15	413
	Grand total	1,174	1,155	97	982	76	1,058
Office classification numbers.	The following are included above:						
	Diagnosis of injuries:						
3	Concussion (brain)	2	2	.....	1	1	2
4	Contusion	2	2	.....	2	.....	2
5	Crushing	62	61	12	48	1	49
7	Dislocation of joint	3	3	.....	3	.....	3
10	Eye and annexa, traumatisms	1	1	1	.....	.....	.....
12	Fracture, simple	49	48	4	44	.....	44
13	Fracture, compound	60	59	5	53	1	54
15	Hemorrhage, and results	8	8	.....	8	.....	8
20	Wounds, multiple	7	7	.....	7	.....	7
21	Wounds, penetrating	20	20	.....	16	4	20
22	Wounds, perforating	33	33	2	29	2	31
23	Wounds, other	9	9	.....	8	1	9

Army, 1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	910,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
38	.....	38	9	4	1	5	3	2	.....	.....	.....	1	.....	165–174
211	6	217	48	20	4	24	6	13	2	8	1	2	1	
.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	175
14	.....	14	4	.....	.....	.....	.....	1	.....	1	.....	.....	.....	176–177
1	.....	1	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	178
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	179
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	180
.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181
39	1	40	6	10	1	11	.....	4	1	.....	.....	.....	.....	182
45	5	50	14	2	2	4	3	3	1	1	.....	1	.....	183
5	.....	5	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	184
10	.....	10	4	2	.....	3	.....	2	.....	.....	1	.....	.....	185
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	187
15	.....	15	3	.....	1	1	.....	1	.....	1	.....	.....	.....	188a
4	.....	4	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	188b
17	.....	17	2	1	.....	1	2	.....	.....	.....	.....	.....	.....	188c
20	.....	20	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	188d
10	.....	10	5	1	.....	1	.....	.....	.....	.....	.....	1	.....	188ea
19	.....	19	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	188eb
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	188fb
3	.....	3	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	189
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	196
5	2	7	4	.....	.....	.....	.....	1	.....	.....	.....	1	.....	197–199
11	.....	11	5	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	202
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202a
11	.....	11	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	202e
7	1	8	2	1	1	2	.....	1	.....	1	.....	.....	.....	203
2	1	3	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	203a
.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	203c
5	.....	5	1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	203d
584	90	674	113	21	12	33	7	5	10	27	13	3	12	
274	9	283	68	25	6	31	9	17	2	9	2	4	1	
858	99	957	181	46	18	64	16	22	12	36	15	7	13	
446	49	495	67	21	12	33	5	5	10	18	12	2	12	
269	9	278	66	24	6	30	5	17	2	9	2	4	1	
715	58	773	133	45	18	63	14	22	12	27	14	6	13	
														Office classification numbers.
.....	1	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	3
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
36	.....	36	8	1	1	2	.....	2	.....	.....	1	.....	1	5
1	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
29	.....	29	8	3	.....	3	2	2	.....	.....	.....	1	.....	12
37	1	38	10	2	.....	2	.....	3	.....	.....	1	1	.....	13
5	.....	5	1	2	.....	2	.....	.....	.....	.....	.....	.....	.....	15
2	.....	2	4	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	20
14	2	16	1	.....	2	2	1	.....	.....	.....	.....	.....	.....	21
19	2	21	7	1	.....	1	1	.....	1	.....	.....	.....	.....	22
4	.....	4	.....	.....	1	1	1	1	.....	2	.....	.....	.....	23

TABLE VIII.—*Deaths, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	0.00	0.00	.....	0.01	.....	0.01
2	Typhus fever	.02	.02	0.07	.02	.....	.02
5a	Malarial fever, estivo-autumnal	.00	.00	.....	.01	.....	.01
6	Smallpox	.01	.01	.....	.01	.....	.01
7	Measles	.13	.14	.....	.16	.....	.15
8	Scarlet fever	.03	.03	.....	.03	.....	.03
10	Diphtheria	.01	.01	.....	.02	.....	.02
11	Influenza	.77	.80	.35	.85	0.53	.84
11a	Influenza, with pneumonia	.72	.75	.21	.81	.32	.79
11b	Influenza, without pneumonia	.05	.05	.14	.04	.21	.05
16	Dysentery	.01	.01	.....	.01	.....	.01
24	Meningococcus meningitis	.04	.04	.....	.05	.....	.05
25cf	Other epidemic diseases	.02	.02	.....	.03	.....	.03
31	Tuberculosis of the respiratory system	1.08	1.12	1.12	.89	5.37	1.13
32–36	Tuberculosis of the other organs	.14	.14	.07	.12	.63	.14
37	Disseminated tuberculosis	.06	.06	.....	.06	.21	.07
	Tuberculosis (all)	1.28	1.32	1.19	1.07	6.21	1.34
38	Syphilis	.05	.05	.07	.05	.11	.05
	Venereal diseases (all)	.05	.05	.07	.05	.11	.05
41	Purulent infection, septicemia	.00	.00	.....	.01	.....	.01
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	.14	.14	.70	.10	.11	.10
50	Benign tumors	.02	.02	.....	.03	.....	.03
55	Beriberi	.00	.....	.....	.....	.....	.....
57	Diabetes mellitus	.01	.01	.....	.01	.....	.01
61–65	Other diseases of ductless glands	.01	.01	.07	.01	.....	.01
69	Other general diseases	.02	.02	.07	.02	.....	.02
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	.02	.02	.....	.02	.....	.02
71	Simple meningitis	.03	.03	.07	.02	.11	.03
73	Other diseases of the spinal cord	.00	.00	.....	.01	.....	.01
74	Cerebral hemorrhage, apoplexy	.04	.04	.21	.02	.11	.03
76	General paralysis of the insane	.02	.02	.....	.01	.21	.02
77f	Psychosis, alcoholic	.01	.01	.....	.01	.....	.01
77h	Other forms of mental alienation	.02	.01	.....	02	.....	.02
78	Epilepsy	.01	.01	.07	.01	.....	.01
84c	Other diseases of the nervous system	.03	.03	.....	.04	.....	.04
	B. Organs of special sense.						
86	The ear and the mastoid process	.05	.05	.....	.05	.21	.06
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
88	Endocarditis and myocarditis (acute)	.02	.02	.....	.02	.....	.02
89	Angina pectoris	.02	.02	.14	.01	.....	.01
90a	Valvular diseases of the heart	.08	.08	.35	.04	.42	.06
90ac	Mitral insufficiency	.05	.05	.21	.03	.21	.04
90ae	Other valvular diseases	.02	.02	.14	.01	.21	.02
90b	Cardiac hypertrophy and dilatation	.06	.04	.07	.05	.....	.04
90c	Myocarditis, chronic	.06	.06	.14	.05	.21	.06
90d	Other diseases of the heart (organic)	.02	.02	.....	.03	.....	.03
91c	Other diseases of the arteries	.02	.02	.07	.01	.11	.02
92	Embolism and thrombosis (not cerebral)	.02	.02	.07	.01	.21	.02
94	Diseases of the lymphatic system	.00	.00	.....	.01	.....	.01
95	Hemorrhage without specified cause	.02	.02	.07	.02	.....	.02

Army, 1920; ratios per 1,000.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.01	.....	0.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.07	0.51	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	0.23	.....	.....	.....	.....	.....	5a
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	1.02	.....	.....	.....	6
.11	.....	.10	0.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.01	.....	.01	.13	.....	.....	.....	.....	.....	0.81	1.02	.....	.....	.....	8
.01	.....	.01	.....	0.11	.....	0.09	.....	.....	.....	1.02	.....	.....	.....	10
.89	0.64	.88	1.18	.....	.....	.....	0.20	.23	.....	2.05	2.53	.....	0.14	11
.85	.39	.82	1.12	.....	.....	.....	.20	.23	.....	2.05	2.53	.....	.14	11a
.04	.26	.05	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11b
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
.06	.....	.05	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
.01	.....	.01	.13	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	25cf
.93	6.18	1.20	1.05	.34	1.73	.57	.20	.23	1.62	6.14	.....	.....	.27	31
.11	.64	.14	.26	.11	.58	.19	.20	.....	.....	.....	.....	.....	.14	32–36
.04	.13	.05	.20	.....	.58	.09	.....	.....	.....	2.05	.....	.....	.....	37
1.08	6.96	1.39	1.51	.45	2.89	.85	.40	.23	1.62	8.19	.....	.....	.41	
.02	.....	.02	.26	.11	.58	.19	.....	.....	.....	.....	.....	.....	.....	38
.02	.....	.02	.26	.11	.58	.19	.....	.....	.....	.....	.....	.....	.....	
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
.12	.13	.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.14	43–49
.04	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.14	55
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61–65
.01	.....	.01	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
.02	.....	.02	.....	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	70
.01	.13	.01	.13	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	71
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73
.01	.13	.02	.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	74
.01	.26	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77f
.01	.....	.01	.07	.11	.....	.09	.....	.....	.....	.....	.....	0.65	.....	77h
.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
.04	.....	.03	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84c
.06	.26	.07	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
.04	.52	.06	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90a
.03	.26	.04	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90ac
.01	.26	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90ae
.05	.....	.05	.....	.....	.....	.....	.....	.23	.....	.....	.....	.....	.41	90b
.04	.26	.05	.07	.11	.....	.09	.....	.....	1.62	.....	.....	.....	.....	90c
.04	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90d
.01	.13	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91c
.01	.26	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
.02	.....	.02	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95

TABLE VIII.—*Deaths, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,565	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa	0.04	0.04	0.21	0.03	.....	0.03
97c	Sinusitis	.03	.03	.14	.02	.....	.02
97e	Nasal fossæ, other diseases of	.01	.01	.07	.01	.....	.01
98	Diseases of the larynx	.01	.01	.....	.01	.....	.01
100	Pneumonia, broncho	.35	.35	.35	.36	0.11	.35
101a	Pneumonia, lobar	.51	.52	.28	.55	.42	.54
101b	Pneumonia, not otherwise defined	.02	.02	.....	.02	.....	.02
102c	Pleurisy, other	.03	.03	.07	.03	.....	.03
105–107	Other diseases of the respiratory system	.02	.02	.....	.02	.....	.02
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).						
109bc	Tonsillitis, acute, follicular	.03	.03	.07	.03	.....	.03
109be	Other diseases of the pharynx and tonsils	.01	.01	.....	.01	.....	.01
111a	Ulcer of the stomach	.03	.03	.14	.02	.....	.02
111b	Ulcer of the duodenum	.01	.01	.07	.01	.....	.01
117	Appendicitis and typhlitis	.11	.11	.21	.10	.21	.10
118a	Hernia	.01	.01	.....	.02	.....	.02
118b	Intestinal obstruction	.02	.02	.....	.02	.11	.03
119b	Other diseases of the intestines	.03	.03	.07	.03	.....	.03
127	Other diseases of the digestive system	.02	.02	.07	.01	.21	.02
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	.02	.02	.....	.02	.11	.03
129	Chronic nephritis	.11	.11	.21	.07	.84	.11
131a	Pyogenic infection of the kidney	.01	.01	.....	.02	.....	.02
136e	Other nonvenereal diseases of the male genital organs	.01	.01	.07	.01	.11	.01
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152	Furuncle	.02	.02	.14	.02	.....	.02
153	Acute abscess	.02	.02	.....	.02	.11	.03
154j	Other diseases of the skin and cellular tissue	.01	.01	.....	.02	.....	.02
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155c	Fractures, faulty union of	.00	.00	.....	.01	.....	.01
	XI. MALFORMATION.						
159	Congenital malformations	.00	.00	.....	.01	.....	.01
	XV. ILL-DEFINED DISEASES.						
204–205	Not specified or ill-defined	.01	.01	.....	.02	.....	.02
	Total for diseases	4.67	4.80	5.72	4.41	10.74	4.73
	Total for diseases (excluding deaths for cases admitted prior to 1920)	3.42	3.50	3.98	3.30	6.42	3.46

Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White	Porto Ricans.	Philippine Scouts.	
0.03	.....	0.03	0.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	97
.02	.....	.02	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	97c
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	97e
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	0.51	.....	.....	98
.29	.....	.28	.46	0.57	0.58	0.57	0.40	0.23	0.81	5.12	1.52	.....	0.27	100
.55	0.39	.54	.79	.11	.58	.19	.....	.....	1.62	4.09	1.01	1.30	.....	101a
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	101b
.02	.....	.02	.13	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	102c
.01	.....	.01	.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	105–107
.01	.....	.01	.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109bc
.....	.....	.....	.....	.....	.....	.....	.20	.....	.....	1.02	.....	.....	.....	109be
.01	.....	.01	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111a
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111b
.09	.26	.10	.20	.11	.....	.09	.....	.....	.81	.....	.....	.....	.14	117
.01	.....	.01	.....	.....	.....	.....	.....	.....	.81	.....	.....	.....	.....	118a
.02	.13	.03	.....	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	118b
.04	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119b
.01	.13	.01	.....	.....	.58	.09	.....	.....	.....	.....	.....	.....	.....	127
.02	.....	.02	.07	.....	.58	.09	.....	.....	.....	.....	.....	.....	.....	128
.08	.90	.12	.07	.....	.58	.09	.....	.....	.....	.....	.....	.....	.....	129
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.51	.....	.....	131a
.01	.13	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	136e
.02	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	152
.03	.....	.03	.....	.....	.58	.09	.....	.....	.....	.....	.....	.....	.....	153
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	1.02	.....	.....	.....	154j
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	155c
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	159
.02	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	204–205
4.20	11.59	4.59	7.42	2.38	6.92	3.12	1.40	1.13	8.11	27.64	6.58	1.96	1.65	
3.21	6.31	3.37	4.40	2.38	6.92	3.12	1.00	1.13	8.11	18.42	6.08	1.30	1.65	

TABLE VIII.—*Deaths, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored	Total.
	XIV. EXTERNAL CAUSES.						
165–174	Suicides (all)	0.31	0.31	0.42	0.32	0.11	0.31
	Accidental traumatisms	1.69	1.75	2.30	1.75	1.05	1.71
175	Poisoning by food	.00	.00	.....	.01	.....	.01
176–177	Other actue poisonings (gas excepted)	.10	.10	.07	.11	.....	.11
178	Conflagrations	.02	.02	.....	.03	.....	.03
179	Burns (conflagrations excepted)	.00	.00	.....	.01	.....	.01
180	Mechanical suffocation	.01	.01	.....	.01	.....	.01
181	Absorption of irrespirable or poisonous gas	.01	.01	.....	.02	.....	.02
182	Drowning	.31	.32	.21	.34	.21	.33
183	Firearms (wounds of war excepted)	.38	.39	.14	.39	.74	.41
184	Cutting and piercing instruments	.03	.03	.....	.04	.....	.04
185	Fall	.10	.10	.07	.11	.....	.11
187	Machines	.01	.01	.....	.01	.....	.01
188a	Railroad accident	.10	.10	.....	.11	.11	.11
188b	Street-car accident	.03	.03	.....	.03	.....	.03
188c	Automobile accident	.12	.13	.28	.12	.....	.12
188d	Balloon and airplane accident	.21	.21	1.47	.12	.....	.12
188ea	Motor cycle accident	.08	.08	.....	.09	.....	.09
188eb	Other vehicles	.12	.12	.....	.14	.....	.13
188fb	Other crushings	.02	.02	.07	.02	.....	.02
189	Animals (not poisonous)	.02	.02	.....	.03	.....	.03
196	Accidental electric shocks	.01	.01	.....	.01	.....	.01
197–199	Homicide (all)	.06	.06	.....	.06	.21	.06
202	Other external violence (cause specified)	.10	.10	.21	.10	.....	.09
202a	Falling objects	.01	.01	.07	.01	.....	.01
202e	Other causes	.09	.09	.14	.09	.....	.09
203	Other external violence (cause not specified)	.07	.07	.07	.07	.21	.08
203a	Athletic exercises	.03	.03	.07	.02	.11	.03
203c	Fighting (brawls)	.00	.00	.....	.....	.11	.01
203d	Other causes	.04	.04	.....	.05	.....	.04
	Total for diseases	4.67	4.80	5.72	4.41	10.74	4.73
	Total for external causes	2.24	2.31	3.00	2.30	1.58	2.26
	Grand total	6.91	7.12	8.72	6.71	12.32	6.99
	Excluding deaths for cases admitted prior to 1920:						
	Total for diseases	3.42	3.50	3.98	3.30	6.42	3.46
	Total for external causes	2.19	2.26	2.79	2.25	1.58	2.22
	Grand total	5.60	5.76	6.77	5.55	8.00	5.68
Office classification numbers.							
	The following are included above:						
	Diagnoses of injuries—						
3	Concussion (brain)	.01	.01	.....	.01	.11	.01
4	Contusion	.01	01	.....	.01	.....	.01
5	Crushing	.30	.30	.84	.27	.11	.26
7	Dislocation of joint	.01	.01	.....	.02	.....	.02
10	Eye and annexa, traumatisms	.00	.00	.07	.....	.....	.....
12	Fracture, simple	.23	.24	.28	.25	.....	.24
13	Fracture, compound	.29	.29	.35	.30	.11	.29
15	Hemorrhage, and results	.04	.04	.....	.05	.....	.04
20	Wounds, multiple	.03	.03	.....	.04	.....	.04
21	Wounds, penetrating	.10	.10	.....	.09	.42	.11
22	Wounds, perforating	.16	.16	.14	.16	.21	.17
23	Wounds, other	.04	.04	.....	.05	.11	.05

Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.27	.....	0.26	0.59	0.45	0.58	0.47	0.60	0.45	.....	.....	.....	0.65	0.14	165–174
1.52	0.77	1.48	3.15	2.26	2.31	2.27	1.20	2.94	1.62	8.19	0.51	1.30	.....	
.....	.....	.....	.....	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	175
.10	.....	.10	.26	.....	.....	.....	.....	.23	.....	1.02	.....	.....	.....	176–177
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	4.09	.....	.....	.....	178
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	179
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	180
.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181
.28	.13	.27	.39	1.13	.58	1.04	.....	.90	.81	.....	.....	.....	.....	182
.32	.64	.34	.92	.23	1.15	.38	.60	.68	.81	1.02	.....	.65	.....	183
.04	.....	.03	.....	.....	.....	.....	.....	.23	.....	1.02	.....	.....	.....	184
.07	.....	.07	.26	.34	.....	.28	.....	.45	.....	.....	.51	.....	.....	185
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	187
.11	.....	.10	.20	.....	.58	.09	.....	.23	.....	1.02	.....	.....	.....	188a
.03	.....	.03	.....	.20	.....	.19	.....	.....	.....	.....	.....	.....	.....	188b
.12	.....	.12	.13	.11	.....	.09	.40	.....	.....	.....	.....	.....	.....	188c
.14	.....	.14	.07	.....	.....	.....	.....	.23	.....	.....	.....	.....	.....	188d
.07	.....	.07	.33	.11	.....	.09	.....	.....	.....	.....	.....	.65	.....	188ea
.14	.....	.13	.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.14	188eb
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	188fb
.02	.....	.02	.07	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	189
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	196
.04	.26	.05	.26	.....	.....	.....	.....	.23	.....	.....	.....	.65	.....	197–199
.08	.....	.07	.33	.....	.....	.....	.....	.....	.....	.....	.51	.....	.....	202
.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202a
.08	.....	.07	.26	.....	.....	.....	.....	.....	.....	.....	.51	.....	.....	202e
.05	.13	.05	.13	.11	.58	.19	.....	.23	.....	1.02	.....	.....	.....	203
.01	.13	.02	.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	203a
.....	.....	.....	.....	.....	.58	.09	.....	.....	.....	.....	.....	.....	.....	203c
.04	.....	.03	.07	.....	.....	.....	.....	.23	.....	1.02	.....	.....	.....	203d
4.20	11.59	4.59	7.42	2.38	6.92	3.12	1.40	1.13	8.11	27.64	6.58	1.96	1.65	
1.97	1.16	1.93	4.47	2.83	3.46	2.93	1.81	3.84	1.62	9.21	1.01	2.61	.14	
6.17	12.75	6.51	11.89	5.20	10.39	6.05	3.21	4.97	9.73	36.85	7.59	4.57	1.78	
3.21	6.31	3.37	4.40	2.38	6.92	3.12	1.00	1.13	8.11	18.42	6.08	1.30	1.65	
1.93	1.16	1.89	4.34	2.71	3.46	2.84	1.81	3.84	1.62	9.21	1.01	2.61	.14	
5.14	7.47	5.26	8.74	5.09	10.39	5.96	2.81	4.97	9.73	27.64	7.09	3.91	1.78	
														Office classification numbers.
.....	.13	.01	.....	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	3
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
.26	.....	.25	.53	.11	.58	.19	.....	.45	.....	.....	.51	.....	.14	5
.01	.....	.01	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.21	.....	.20	.53	.34	.....	.28	.40	.45	.....	.....	.....	.65	.....	12
.27	.13	.26	.66	.23	.....	.19	.....	.68	.....	.....	.51	.65	.....	13
.04	.....	.03	.07	.23	.....	.19	.....	.....	.....	.....	.....	.....	.....	15
.01	.....	.01	.26	.....	.....	.....	.....	.....	.....	1.02	.....	.....	.....	20
.10	.26	.11	.07	.....	1.15	.19	.20	.....	.....	.....	.....	.....	.....	21
.14	.26	.14	.46	.11	.....	.09	.20	.....	.81	.....	.....	.....	.....	22
.03	.....	.03	.....	.....	.58	.09	.20	.23	.....	2.05	.....	.....	.....	23

TABLE IX.—*Days lost, United States*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	1,655	1,655	331	1,263	61	1,324
2	Typhus fever	649	649	49	600	.....	600
3	Relapsing fever	50	50	.....	50	.....	50
	Malarial fevers (all)	23,542	20,541	504	19,095	942	20,037
5a	Malarial fever, estivo-autumnal	3,248	2,663	100	2,443	120	2,563
5b	Malarial fever, quartan	36	21	.....	21	.....	21
5c	Malarial fever, tertian	19,461	17,119	376	15,973	770	16,743
5d	Malarial fever, unclassified	797	738	28	658	52	710
6	Smallpox	1,793	1,770	.....	1,720	50	1,770
7	Measles	56,484	55,859	168	55,628	63	55,691
8	Scarlet fever	9,905	9,905	146	9,688	71	9,759
9	Whooping cough	402	402	36	366	.....	366
10	Diphtheria	6,861	6,861	327	6,512	22	6,534
11	Influenza	186,018	184,870	8,693	171,347	4,830	176,177
11a	Influenza, with pneumonia	34,979	34,783	949	33,433	401	33,834
11b	Influenza, without pneumonia	151,039	150,087	7,744	137,914	4,429	142,343
13	Mumps	38,312	34,865	489	33,958	418	34,376
16	Dysentery (all)	8,474	7,468	731	6,588	149	6,737
16a	Dysentery, amebic	7,222	6,437	538	5,811	88	5,899
16b	Dysentery, bacillary	89	89	.....	47	42	89
16c	Dysentery, unspecified or others	1,163	942	193	730	19	749
21	Erysipelas	1,833	1,816	217	1,558	41	1,599
24	Meningococcus meningitis	4,838	4,838	23	4,815	.....	4,815
25a	Chicken pox	4,467	3,897	147	3,234	516	3,750
25b	German measles	452	406	13	393	.....	393
25ca	Dengue	17,776	16,948	716	16,174	58	16,232
25cb	Febricula and undetermined fevers	5,675	4,933	157	4,691	85	4,776
25cc	Typhoid vaccination	10,278	10,165	78	9,832	255	10,087
25cd	Vaccinia	10,698	10,629	20	10,553	56	10,609
25ce	Carrier, epidemic diseases	5,579	5,569	483	5,076	10	5,086
25cf	Other epidemic diseases	32	32	.....	32	.....	32
27	Anthrax	102	102	.....	99	3	102
30	Mycoses	1,746	1,713	90	1,350	273	1,623
31	Tuberculosis of the respiratory system	371,197	367,069	80,848	260,842	25,379	286,221
32–36	Tuberculosis of the other organs	37,695	37,433	2,506	30,284	4,643	34,927
37	Disseminated tuberculosis	624	624	.....	563	61	624
	Tuberculosis (all)	409,516	405,126	83,354	291,689	30,083	321,772
38	Syphilis	140,687	137,466	6,552	122,048	8,866	130,914
39	Soft chancre	121,660	118,491	338	105,010	13,143	118,153
40	Gonococcus infection	435,991	430,933	2,765	409,559	18,609	428,168
	Venereal diseases (all)	698,338	686,890	9,655	636,617	40,618	677,235
41	Purulent infection, septicemia	121	121	.....	121	.....	121
42	Other infectious diseases	914	827	78	740	9	749
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	7,835	7,761	1,998	4,979	784	5,763
50	Benign tumors	10,263	10,019	810	8,595	614	9,209
51	Acute rheumatic fever	14,210	14,128	508	12,490	1,130	13,620
52b	Osteoarthritis	55,044	54,645	4,244	49,155	1,246	50,401
54	Pellagra	146	146	.....	146	.....	146
55	Beriberi	891	11	11	.....	.....	.....
56	Rickets	1,371	1,330	.....	1,233	97	1,330
57	Diabetes mellitus	3,251	3,207	1,209	1,998	.....	1,998
58a	Pernicious anemia	352	352	16	336	.....	336
58b	Other anemias and chlorosis	765	749	196	553	.....	553
59	Diseases of the pituitary gland	121	121	.....	121	.....	121

Army, 1920; absolute numbers.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
704	61	765	390	.....	.....	.....	.....	.....	.....	125	40	.....	.....	1a
.....	.....	.....	.....	23	.....	25	.....	.....	.....	568	9	.....	.....	2
30	.....	30	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	3
15,082	150	15,232	276	1,151	792	1,943	112	2,387	37	.....	50	455	2,548	
1,236	.....	1,236	8	65	120	185	.....	1,134	.....	.....	.....	94	491	5a
11	.....	11	.....	.....	.....	.....	.....	10	.....	.....	.....	.....	15	5b
13,233	123	13,356	268	1,062	647	1,709	89	1,243	37	.....	46	351	1,991	5c
602	27	629	5	24	25	49	23	.....	.....	.....	4	8	51	5d
1,504	50	1,554	.....	.....	.....	.....	25	.....	28	84	79	23	.....	6
49,576	63	49,639	3,572	927	.....	927	175	465	64	472	577	194	431	7
7,012	71	7,083	1,465	218	.....	218	37	.....	590	80	286	.....	.....	8
366	.....	366	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
4,822	22	4,844	1,435	75	.....	75	79	29	.....	74	.....	.....	.....	10
152,079	4,814	156,893	14,698	1,480	16	1,496	445	142	15	1,068	1,420	687	461	11
29,202	401	29,603	3,223	174	.....	174	282	28	.....	152	372	72	124	11a
122,877	4,415	127,290	11,475	1,306	16	1,322	163	114	15	916	1,048	615	337	11b
22,993	397	23,390	3,276	2,426	21	2,447	164	1,358	18	2,854	869	1,119	2,328	13
1,245	64	1,309	127	4,103	85	4,188	298	80	580	41	86	.....	1,006	16
777	22	799	119	3,839	66	3,905	298	71	580	41	86	.....	785	16a
47	42	89	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16b
421	.....	421	8	264	19	283	.....	7	.....	.....	30	.....	221	16c
1,097	41	1,138	232	122	.....	122	.....	5	72	28	4	.....	17	21
3,010	.....	3,010	866	188	.....	188	.....	192	75	194	290	.....	.....	24
2,495	377	2,872	498	58	139	197	80	21	125	19	.....	179	291	25a
358	.....	358	7	28	.....	28	.....	.....	.....	.....	.....	.....	46	25b
19	.....	19	.....	15,909	58	15,967	.....	5	12	.....	56	7	821	25ca
2,619	85	2,704	43	1,540	.....	1,540	29	221	.....	94	145	49	693	25cb
9,531	255	9,786	44	85	.....	85	66	38	6	45	17	80	35	25cc
10,284	56	10,340	110	5	.....	5	52	60	28	14	.....	69	.....	25cd
4,569	10	4,579	243	32	.....	32	93	99	7	27	7	.....	10	25ce
.....	.....	.....	.....	.....	.....	.....	.....	32	.....	.....	.....	.....	.....	25cf
99	.....	99	.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	27
315	27	588	1,035	.....	.....	.....	.....	.....	.....	.....	.....	.....	35	30
232,921	22,699	255,620	13,989	7,854	2,680	10,534	1,444	1,400	508	1,955	771	1,046	3,082	31
24,899	4,632	29,531	3,324	674	11	685	641	57	85	288	316	7	255	32–36
382	19	401	128	.....	42	42	.....	.....	.....	53	.....	.....	.....	37
258,202	27,350	285,552	17,441	8,528	2,733	11,261	2,085	1,457	593	2,296	1,087	1,053	3,337	
77,726	8,239	85,965	26,952	8,813	627	9,440	1,447	1,125	2,097	2,976	912	2,590	631	38
47,876	7,357	55,233	22,125	19,232	5,786	25,018	695	2,073	4,888	6,835	1,286	2,40:	766	39
208,704	11,853	220,557	108,808	51,699	6,756	58,455	8,938	3,113	12,998	10,855	4,444	987	4,071	40
334,306	27,449	361,755	157,885	79,744	13,169	92,913	11,080	6,311	19,983	20,666	6,642	5,980	5,468	
114	.....	114	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
488	.....	488	251	.....	9	9	.....	.....	.....	1	.....	87	.....	42
4,268	784	5,052	167	19	.....	19	8	498	.....	.....	19	.....	74	43–49
6,575	549	7,124	746	654	65	719	404	75	77	64	.....	11	233	50
9,084	1,130	10,214	2,094	538	.....	538	99	177	166	16	316	53	29	51
36,665	1,215	37,880	6,223	2,499	31	2,530	1,902	252	411	984	,219	172	227	52b
146	.....	146	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	871	55
782	26	808	169	116	71	187	72	.....	.....	94	.....	.....	41	56
1,702	.....	1,702	.....	129	.....	129	.....	148	.....	19	.....	.....	44	57
336	.....	336	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58a
345	.....	345	199	9	.....	9	.....	.....	.....	.....	.....	.....	16	58b
121	.....	121	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59

TABLE IX.—*Days lost, United States Army,*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	II. GENERAL DISEASES NOT INCLUDED ABOVE—continued.						
60a	Exophthalmic goiter	9,813	9,648	853	8,642	153	8,795
60ba	Goiter, simple	3,649	3,560	282	3,278	.....	3,278
61–65	Other diseases of ductless glands	1,298	1,298	125	1,173	.....	1,173
66	Alcoholism (acute or chronic)	10,660	10,655	264	10,294	97	10,391
67a	Chronic lead poisoning	34	34	.....	34	.....	34
68a	Drug addiction	3,902	3,902	55	3,774	73	3,847
68b	Chronic poisoning by other organic substances	79	79	.....	79	.....	79
69	Other general diseases	8,476	8,307	670	7,283	354	7,637
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	1,907	1,907	581	1,326	.....	1,326
71	Simple meningitis	323	323	28	290	5	295
72	Tabes dorsalis	287	238	64	136	38	174
73	Other diseases of the spinal cord	2,586	2,562	143	2,419	.....	2,419
74	Cerebral hemorrhage, apoplexy	395	395	5	348	42	390
75a	Hemiplegia	1,239	1,239	332	833	74	907
75ba	Facial paralysis	1,204	1,195	102	1,056	37	1,093
75bb	Other paralyses without specified cause	2,832	2,801	488	2,313	.....	2,313
76	General paralysis of the insane	5,841	5,841	825	4,932	84	5,016
77a	Constitutional psychopathic state	28,487	28,402	608	27,643	151	27,794
77b	Mental deficiency	25,067	25,059	.....	24,586	473	25,059
77c	Dementia præcox	79,242	79,043	837	75,948	2,258	78,206
77d	Psychasthenia	2,042	2,042	1,247	795	.....	795
77e	Psychoneurosis	21,721	21,721	3,752	17,764	205	17,969
77f	Psychosis, alcoholic	2,523	2,523	2	2,488	33	2,521
77g	Psychosis, manic depressive	16,398	16,357	1,005	15,165	187	15,352
77h	Other forms of mental alienation	11,859	11,730	336	10,919	475	11,394
78	Epilepsy	21,123	21,098	138	20,424	536	20,960
79	Convulsions (nonepileptic)	616	616	.....	596	20	616
81	Chorea	1,520	1,520	.....	1,457	63	1,520
82a	Hysteria and results (psychoses excepted)	14,837	14,828	605	13,750	473	14,223
82b	Neuralgia	2,361	2,312	211	2,005	96	2,101
82c	Neuritis	11,958	10,370	2,010	8,010	350	8,360
84a	Neurasthenia	21,245	21,193	4,277	16,583	333	16,916
84b	Neuro-circulatory asthenia	2,474	2,397	315	2,082	.....	2,082
84c	Other diseases of the nervous system	19,572	19,558	802	18,046	710	18,756
	B. Organs of special sense.						
85	The eye and annexa (all)	54,730	53,730	3,994	46,469	3,267	49,736
85a	Refractive error	6,737	6,607	283	6,267	57	6,324
85b	Trachoma	5,714	5,714	66	5,553	95	5,648
85c	Conjunctivitis (others)	9,136	8,848	423	7,937	488	8,425
85d	Iritis	5,144	5,068	305	4,115	648	4,763
85e	Keratitis	5,536	5,429	770	4,580	79	4,659
85f	Eyelids, diseases of	2,066	2,040	144	1,651	245	1,896
85g	Eye and annexa, other diseases of	20,397	20,024	2,003	16,366	1,655	18,021
86	The ear and the mastoid process (all)	51,621	51,379	2,876	47,197	1,306	48,503
86aa	Otitis media	43,490	43,305	2,411	39,706	1,188	40,894
86ab	Otitis externa	2,530	2,479	85	2,391	3	2,394
86ac	Defective hearing, cause not stated	753	753	138	615	.....	615
86ad	Ear, other diseases of	1,191	1,185	158	1,023	4	1,027
86b	Mastoiditis	3,657	3,657	84	3,462	111	3,573

1920; absolute numbers—Continued.

American troops (onlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
6,156	146	6,302	279	1,513	7	1,519	472	.....	.....	56	167	.....	165	60a
2,131	.....	2,131	80	486	.....	486	361	28	29	16	.....	.....	89	60ba
1,081	.....	1,081	10	35	.....	35	.....	29	.....	18	.....	.....	.....	61–65
4,258	72	4,330	3,588	1,151	25	1,176	371	419	176	317	14	2	2	66
20	.....	20	.....	14	.....	14	.....	.....	.....	.....	.....	.....	.....	67a
2,741	68	2,809	442	327	5	332	18	211	.....	8	27	.....	.....	68a
73	.....	73	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	68b
5,572	342	5,914	996	233	12	245	287	11	167	.....	17	66	103	69
805	.....	805	450	1	.....	1	.....	70	.....	.....	.....	.....	.....	70
129	5	134	56	45	.....	45	.....	17	.....	43	.....	.....	.....	71
122	38	160	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	72
1,895	.....	1,895	265	259	.....	259	.....	.....	.....	.....	.....	24	.....	73
332	.....	332	.....	16	42	58	.....	.....	.....	.....	.....	.....	.....	74
520	74	594	307	6	.....	6	.....	.....	.....	.....	.....	.....	.....	75a
891	37	928	127	.....	.....	.....	.....	.....	.....	38	.....	9	.....	75ba
1,621	.....	1,621	318	212	.....	212	80	8	74	.....	.....	.....	31	75bb
4,647	84	4,731	84	33	.....	33	.....	168	.....	.....	.....	.....	.....	76
20,943	144	21,087	2,379	2,114	7	2,121	804	766	101	398	138	.....	85	77a
18,711	206	18,917	1,219	2,426	267	2,693	1,119	91	.....	784	236	.....	8	77b
61,210	1,986	63,196	5,495	2,893	272	3,165	1,481	2,021	234	816	1,888	52	147	77c
543	.....	543	34	42	.....	42	121	53	.....	2	.....	.....	.....	77d
11,612	34	11,646	1,536	2,428	171	2,599	1,299	269	316	237	67	.....	.....	77e
1,383	32	1,415	592	291	1	292	168	.....	5	.....	49	.....	.....	77f
13,271	187	13,458	1,360	50	.....	50	334	142	.....	.....	8	.....	41	77g
6,812	399	7,211	1,068	1,720	76	1,796	328	947	.....	4	40	21	108	77h
15,297	536	15,833	2,801	1,745	.....	1,745	126	133	28	163	131	.....	25	78
596	20	616	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
864	63	927	452	.....	.....	.....	16	125	.....	.....	.....	.....	.....	81
11,563	468	12,031	919	147	5	152	520	96	58	294	153	9	.....	82a
1,715	88	1,803	153	80	8	88	10	34	8	.....	5	35	14	82b
6,047	350	6,397	1,293	200	.....	200	108	21	80	199	62	1,588	.....	82c
13,006	333	13,339	2,055	753	.....	753	275	241	50	203	.....	5	47	84a
1,108	.....	1,108	193	395	.....	395	139	126	34	65	22	77	.....	84b
14,535	682	15,217	1,000	742	28	770	1,204	135	2	105	323	4	10	84c
37,064	2,280	39,344	2,119	3,317	987	4,304	2,394	1,034	239	239	63	508	492	85
4,107	46	4,153	90	783	11	794	1,168	90	6	11	12	113	17	85a
5,269	95	5,364	146	11	.....	11	.....	120	.....	.....	7	.....	.....	85b
6,522	464	6,986	743	283	24	307	156	121	54	53	5	86	202	85c
3,569	585	4,154	181	174	63	237	48	133	.....	.....	10	38	38	85d
4,286	79	4,365	126	4	.....	4	94	4	14	52	.....	26	81	85e
1,091	5	1,096	320	170	240	410	45	21	.....	4	.....	.....	26	85f
12,220	1,006	13,226	513	1,892	649	2,541	883	545	165	119	29	245	128	85g
37,061	1,082	38,143	3,409	3,727	224	3,951	963	999	254	638	146	143	99	86
31,482	968	32,450	2,955	2,865	220	3,085	682	776	236	587	123	130	55	86aa
1,157	3	1,160	36	670	.....	670	271	205	18	29	5	11	40	86ab
588	.....	588	.....	27	.....	27	.....	.....	.....	.....	.....	.....	.....	86ac
943	.....	943	8	30	4	34	10	10	.....	22	.....	2	4	86ad
2,891	111	3,002	410	135	.....	135	.....	8	.....	.....	18	.....	.....	86b

[1] See page 85.

TABLE IX.—*Days lost, United States Army,*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
87	Pericarditis	704	704	.....	602	102	704
88	Endocarditis and myocarditis (acute)	685	685	73	536	76	612
89	Angina pectoris	212	212	56	156	.....	156
90a	Valvular diseases of the heart (all)	25,079	25,013	2,329	22,085	599	22,684
90aa	Aortic insufficiency	2,374	2,374	282	1,962	130	2,092
90ab	Aortic stenosis	559	512	62	450	.....	450
90ac	Mitral insufficiency	16,763	16,744	1,569	14,871	304	15,175
90ad	Mitral stenosis	2,822	2,822	76	2,673	73	2,746
90ae	Other valvular diseases	2,561	2,561	340	2,129	92	2,221
90b	Cardiac hypertrophy and dilatation	1,023	1,002	16	925	61	986
90c	Myocarditis, chronic	7,381	7,355	1,595	5,474	286	5,760
90d	Other diseases of the heart (organic)	2,313	2,313	15	2,223	75	2,298
91a	Aneurysm	287	287	.....	228	59	287
91b	Arteriosclerosis	4,142	4,142	2,435	1,555	152	1,707
91c	Other diseases of the arteries	489	489	.....	270	219	489
92	Embolism and thrombosis (not cerebral)	806	806	26	587	193	780
93a	Hemorrhoids	17,853	17,790	1,597	14,904	1,289	16,193
93b	Varicocele	7,597	7,555	188	7,359	8	7,367
93c	Varicose veins	4,887	4,882	419	4,200	263	4,463
93d	Phlebitis	819	802	218	560	24	584
94	Diseases of the lymphatic system	26,353	25,305	340	22,894	2,071	24,965
95	Hemorrhage without specified cause	421	403	114	278	11	289
96a	Cardiac arrhythmia	1,488	1,488	94	1,394	.....	1,394
96b	Cardiac disorder, functional	6,514	6,514	501	5,849	164	6,013
96c	Tachycardia	4,860	4,854	297	4,234	323	4,557
96d	Other diseases of the circulatory system	428	422	14	406	2	408
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa (all)	48,309	47,821	4,749	42,307	765	43,072
97a	Deviation of nasal septum, and spurs	10,526	10,506	1,147	9,357	2	9,359
97b	Turbinate hypertrophy	1,211	1,168	95	1,067	6	1,073
97c	Sinusitis	11,764	11,542	1,704	9,602	236	9,838
97d	Rhinitis	22,262	22,059	1,198	20,357	504	20,861
97e	Nasal fossæ, other diseases of	2,546	2,546	605	1,924	17	1,941
98	Diseases of the larynx (all)	5,540	5,397	658	4,532	207	4,739
98a	Laryngitis, acute catarrhal	5,385	5,262	658	4,433	171	4,604
98b	Larynx, other diseases of	135	135	.....	99	36	135
99	Bronchitis	136,116	132,584	9,363	118,929	4,292	123,221
100	Pneumonia, broncho	21,255	20,659	533	19,676	450	20,126
101a	Pneumonia, lobar	23,663	22,911	696	20,921	1,294	22,215
101b	Pneumonia, not otherwise defined	4,021	4,021	234	3,787	.....	3,787
102a	Pleurisy, suppurative	19,987	19,987	1,235	17,227	1,525	18,752
102b	Pleurisy, serofibrinous	8,928	8,746	661	7,860	225	8,085
102c	Pleurisy, others	17,550	17,294	1,334	14,615	1,345	15,960
105	Asthma	10,630	10,373	634	9,233	506	9,739
107	Other diseases of the respiratory system	1,712	1,694	244	1,438	12	1,450
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).						
108a	Pyorrhea alveolaris	3,146	3,130	892	2,237	1	2,238
108b	Other diseases of the mouth and annexa	11,314	10,966	1,928	8,711	327	9,038
109a	Adenoid vegetation	512	512	.....	508	4	512
109ba	Pharyngitis, acute catarrhal	23,137	22,874	881	21,705	288	21,993
109bb	Pharynx, other diseases of	17,348	17,285	361	16,472	452	16,924
109bc	Tonsillitis, acute, follicular	109,516	109,229	3,393	102,562	3,274	105,836
109bd	Tonsillitis, chronic	22,720	22,678	2,547	19,688	443	20,131
109be	Other diseases of the pharynx and tonsils	7,165	7,158	552	6,452	154	6,606
110	Diseases of the œsophagus	269	269	.....	269	.....	269
111a	Ulcer of the stomach	5,178	5,178	525	4,447	206	4,653
111b	Ulcer of the duodenum	3,179	3,179	796	2,312	71	2,383
112	Other diseases of the stomach (cancer excepted)	26,434	25,925	2,305	22,580	1,040	23,620

1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	910,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
532	102	634	47	23	.....	23	.....	.....	.....	.....	.....	.....	.....	87
368	76	444	155	13	.....	13	.....	.....	.....	.....	.....	.....	.....	88
152	.....	152	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	89
16,136	537	16,673	1,861	2,113	62	2,175	904	14	364	543	150	.....	66	90a
1,473	130	1,603	81	384	.....	384	24	.....	.....	.....	.....	.....	.....	90aa
327	.....	327	116	.....	.....	.....	.....	.....	7	.....	.....	.....	47	90ab
11,392	298	11,690	1,304	1,010	6	1,016	394	14	81	526	150	.....	19	90ac
1,897	73	1,970	197	286	.....	286	.....	.....	276	17	.....	.....	.....	90ad
1,047	36	1,083	163	433	56	489	486	.....	.....	.....	.....	.....	.....	90ae
861	49	910	10	51	12	63	.....	.....	.....	.....	.....	.....	21	90b
3,433	283	3,716	732	720	3	723	196	14	216	.....	163	26	.....	90c
1,886	19	1,905	254	.....	56	56	14	.....	.....	69	.....	.....	.....	90d
153	59	212	61	14	.....	14	.....	.....	.....	.....	.....	.....	.....	91a
601	142	743	39	915	10	925	.....	.....	.....	.....	.....	.....	.....	91b
199	219	418	40	31	.....	31	.....	.....	.....	.....	.....	.....	.....	91c
583	193	776	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	92
12,371	1,150	13,521	1,108	779	139	918	155	292	48	151	.....	12	51	93a
5,889	8	5,897	442	513	.....	513	141	317	.....	57	.....	.....	42	93b
3,596	261	3,857	108	205	2	207	207	.....	44	40	.....	.....	5	93c
464	.....	464	96	.....	24	24	.....	.....	.....	.....	.....	17	.....	93d
15,998	1,860	17,858	1,873	2,574	211	2,785	52	1,095	1,067	153	82	414	634	94
204	11	215	65	.....	.....	.....	9	.....	.....	.....	.....	.....	18	95
459	.....	459	4	589	.....	589	117	117	23	18	67	.....	.....	96a
3,592	164	3,756	81	1,725	.....	1,725	179	.....	139	133	.....	.....	.....	96b
3,443	176	3,619	153	379	147	526	182	35	16	26	.....	.....	6	96c
313	2	315	30	14	.....	14	39	.....	.....	.....	10	2	4	96d
35,433	559	35,992	2,398	1,701	206	1,907	1,657	645	239	199	35	265	223	97
7,908	2	7,910	249	528	.....	528	483	142	33	14	.....	15	5	97a
817	6	823	15	112	.....	112	107	16	.....	.....	.....	.....	43	97b
7,887	235	8,122	701	244	1	245	346	138	101	164	21	196	26	97c
17,234	299	17,533	1,314	808	205	1,013	569	335	62	21	14	54	149	97d
1,587	17	1,604	119	9	.....	9	152	14	43	.....	.....	.....	.....	97e
3,838	205	4,043	327	70	2	72	29	21	69	168	10	42	81	98
3,749	169	3,918	327	70	2	72	29	21	69	168	.....	42	81	98a
89	36	125	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	98b
83,312	3,481	86,793	14,900	8,509	811	9,320	3,462	2,243	1,178	4,127	1,198	1,761	1,771	99
13,480	410	13,890	3,123	627	40	667	440	103	118	1,597	183	.....	596	100
14,859	1,287	16,146	2,848	1,268	7	1,275	432	76	448	462	528	137	615	101a
2,664	.....	2,664	1,113	.....	.....	.....	.....	.....	.....	10	.....	.....	.....	101b
12,666	1,525	14,191	4,116	299	.....	299	127	.....	.....	19	.....	.....	.....	102a
5,165	192	5,357	1,753	330	33	363	351	114	25	39	82	29	153	102b
9,982	1,157	11,139	2,719	1,263	188	1,451	270	178	81	73	49	64	192	102c
7,413	472	7,885	130	336	34	370	870	248	144	13	79	81	176	105
1,293	.....	1,293	10	56	12	68	.....	28	.....	.....	51	.....	18	107
1,589	1	1,590	261	143	.....	143	144	16	5	57	22	5	11	108a
6,965	274	7,239	1,038	235	53	288	165	122	83	59	44	75	273	108b
490	4	494	.....	3	.....	3	1	5	.....	.....	40	.....	.....	109a
19,898	249	20,147	305	462	39	501	372	247	265	76	80	124	139	109ba
11,886	155	12,041	3,305	692	297	989	23	203	241	114	8	.....	63	109bb
87,334	3,168	90,502	8,780	1,824	106	1,930	1,547	1,282	420	987	388	173	114	109bc
15,948	280	16,228	992	1,356	163	1,519	694	263	72	60	303	20	22	109bd
4,792	122	4,914	905	236	32	268	218	41	79	165	16	.....	7	109be
269	.....	269	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	110
3,242	206	3,448	862	.....	.....	.....	138	79	.....	.....	126	.....	.....	111a
1,614	.....	1,614	428	.....	71	71	154	97	.....	.....	19	.....	.....	111b
17,511	954	18,465	2,039	1,290	86	1,376	1,050	377	73	157	81	210	299	112

TABLE IX.—*Days lost, United States Army,*

Nos. of international classification	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED)—contd.						
114a	Diarrhea (cause not stated)	3,736	3,598	350	3,022	226	3,248
114b	Enteritis and colitis	13,254	12,222	1,425	10,480	317	10,797
115	Ankylostomiasis	3,887	2,912	9	2,872	31	2,903
116	Other intestinal parasites	2,324	1,654	97	1,459	98	1,557
117	Appendicitis, and typhlitis	52,454	51,955	3,746	45,397	2,812	48,209
118a	Hernia	59,213	58,827	6,559	50,610	1,658	52,268
118b	Intestinal obstruction	973	941	288	641	12	653
119a	Fistula in ano	4,754	4,687	535	3,887	265	4,152
119b	Other diseases of the intestines	41,221	38,878	3,296	33,187	2,395	35,582
123	Biliary calculi	451	451	141	310		310
124a	Cholecystitis	4,217	4,202	601	3,429	172	3,601
124b	Other diseases of the liver	7,462	7,344	679	6,306	359	6,665
127	Other diseases of the digestive system	6,428	6,428	952	5,193	283	5,476
	VII. NONVENERAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	1,827	1,749	382	1,307	60	1,367
129	Chronic nephritis	11,417	11,028	1,736	8,969	323	9,292
131a	Pyogenic infection of the kidney	5,182	5,182	610	4,537	35	4,572
131b	Other diseases of the kidney and annexa	3,055	3,035	738	2,236	61	2,297
132a	Nephrolithiasis	2,218	2,218	557	1,653	8	1,661
132b	Vesical calculi	675	675	92	573	10	583
133a	Cystitis	5,429	5,381	689	4,316	376	4,692
133b	Other diseases of the bladder	1,451	1,446	219	1,000	227	1,227
134a	Stricture of the urethra (nonvenereal)	710	692	143	469	80	549
134b	Urethritis (nonvenereal)	4,206	4,179	103	3,994	82	4,076
135	Diseases of the prostate	883	883	224	634	25	659
136a	Balanitis	1,872	1,865		1,787	78	1,865
136b	Epididymitis	3,112	3,040	282	2,600	158	2,758
136c	Hydrocele	3,302	3,164	274	2,798	92	2,890
136d	Warts, external genital organs	1,987	1,987	47	1,786	154	1,940
136e	Other nonvenereal diseases of the male genital organs	4,185	3,998	422	3,291	285	3,576
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152a	Carbuncle	3,870	3,645	827	2,790	28	2,818
152b	Furuncle	19,152	18,652	612	17,793	247	18,040
153a	Acute abscess	18,052	17,071	529	15,677	865	16,542
153b	Cellulitis	17,757	16,985	466	16,053	466	16,519
154a	Trichophytosis	9,873	8,812	105	8,253	454	8,707
154b	Nails, defects and diseases of	11,992	11,666	62	11,273	331	11,604
154c	Ectoparasites	1,149	1,149	4	1,142	3	1,145
154d	Eczema	7,054	6,866	559	6,121	186	6,307
154e	Erythema	689	689	17	672		672
154f	Herpes	2,836	2,780	55	2,681	44	2,725
154g	Impetigo	5,269	5,258	88	5,160	10	5,170
154h	Psoriasis	2,133	2,098	371	1,711	16	1,727
154i	Scabies	43,035	42,886	350	42,392	144	42,536
154j	Other diseases of the skin and cellular tissue	22,422	22,102	875	20,246	981	21,227
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155a	Osteomyelitis	10,298	10,298	394	8,567	1,337	9,904
155b	Other diseases of the bone	4,251	3,963	545	2,994	424	3,418
155c	Fracture, faulty union of	4,468	4,380	16	4,183	181	4,364
156a	Ankylosis of joints	2,587	2,587	191	2,236	160	2,396
156b	Other diseases of the joints	5,393	5,316	473	4,155	688	4,843
158a	Hallus valgus	3,392	3,386	105	3,166	115	3,281
158b	Myositis	1,738	1,651	72	1,535	44	1,579
158c	Pes planus	27,587	27,501	325	26,391	785	27,176
158d	Tenosynovitis	1,531	1,404	31	1,344	29	1,373
158e	Other diseases of the organs of locomotion	24,213	23,881	1,597	21,326	958	22,284

1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
1,793	86	1,879	342	479	140	619	40	21	196	70	81	.....	138	114a
8,249	316	8,565	814	790	1	791	457	99	62	.....	9	668	364	114b
2,442	19	2,461	17	297	12	309	88	.....	.....	.....	28	63	912	115
1,063	.....	1,063	84	223	98	321	19	22	29	.....	19	2	668	116
36,725	2,481	39,206	2,979	2,906	331	3,237	1,134	1,108	147	4	394	165	334	117
42,122	1,562	43,684	3,483	2,111	96	2,207	956	890	254	695	99	140	246	118a
528	12	540	72	37	.....	37	1	3	.....	.....	.....	.....	32	118b
3,150	265	3,415	668	10	.....	10	24	35	.....	.....	.....	12	55	119a
26,373	2,070	28,443	819	3,625	325	3,950	952	815	332	84	187	330	2,013	119b
149	.....	149	161	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	123
2,613	138	2,751	157	555	34	589	.....	39	11	36	18	3	12	124a
3,793	345	4,138	1,651	567	14	581	12	136	80	10	57	65	53	124b
3,333	279	3,612	774	360	4	364	598	9	.....	119	.....	.....	.....	127
972	16	988	264	8	44	52	.....	63	.....	.....	.....	.....	78	128
7,338	298	7,636	226	288	25	313	875	164	78	.....	.....	.....	389	129
2,701	35	2,736	495	122	.....	122	581	490	.....	95	53	.....	.....	131a
1,520	61	1,581	224	124	.....	124	325	43	.....	.....	.....	.....	20	131b
1,464	8	1,472	37	.....	.....	.....	146	.....	.....	.....	6	.....	.....	132a
571	.....	571	.....	.....	10	10	.....	.....	.....	2	.....	.....	.....	132b
2,873	351	3,224	460	362	25	387	395	77	95	54	.....	22	26	133a
862	156	1,018	21	112	71	183	.....	5	.....	.....	.....	5	.....	133b
386	80	466	40	27	.....	27	.....	8	.....	.....	8	18	.....	134a
3,237	75	3,312	363	299	7	306	77	.....	.....	8	10	3	24	134b
435	14	449	54	105	11	116	.....	40	.....	.....	.....	.....	.....	135
1,524	78	1,602	15	123	.....	123	35	.....	3	67	20	7	.....	136a
2,150	109	2,259	122	140	49	189	16	52	23	91	6	19	53	136b
2,292	56	2,348	303	82	36	118	86	35	.....	.....	.....	135	3	136c
1,073	106	1,179	364	226	48	274	30	13	10	70	.....	.....	.....	136d
2,636	272	2,908	153	146	13	159	174	41	19	120	2	82	105	136e
1,747	28	1,775	668	280	.....	280	38	31	5	10	11	57	168	152a
13,284	216	13,500	2,370	799	31	830	756	278	134	151	21	202	298	152b
12,147	639	12,786	1,432	1,135	226	1,361	207	356	97	36	267	368	613	153a
11,295	466	11,761	2,947	977	.....	977	452	254	36	32	60	368	404	153b
5,236	135	5,371	150	1,732	319	2,051	943	105	40	47	.....	23	1,038	154a
9,141	314	9,455	626	552	17	569	651	280	18	5	.....	35	292	154b
930	3	933	98	29	.....	29	26	.....	5	54	.....	.....	.....	154c
4,624	180	4,804	760	340	6	346	273	47	.....	61	16	147	41	154d
603	.....	603	15	40	.....	40	2	10	.....	.....	2	.....	.....	154e
2,006	41	2,047	242	167	3	170	155	78	26	7	.....	.....	56	154f
3,543	10	3,553	1,191	91	.....	91	236	97	.....	2	.....	3	8	154g
1,501	16	1,517	146	34	.....	34	30	.....	.....	.....	.....	11	24	154h
35,339	126	35,465	5,806	320	18	338	376	42	101	286	122	25	124	154i
15,595	888	16,483	2,253	1,260	93	1,353	534	349	39	207	9	90	230	154j
5,984	1,337	7,321	2,168	19	.....	19	82	268	.....	.....	46	.....	.....	155a
2,666	388	3,054	79	32	36	68	132	64	18	.....	3	273	15	155b
2,403	181	2,584	707	674	.....	674	257	7	.....	135	.....	88	.....	155c
1,735	160	1,895	137	58	.....	58	305	.....	1	.....	.....	.....	.....	156a
2,838	688	3,526	457	425	.....	425	401	23	.....	8	3	13	64	156b
2,546	115	2,661	460	71	.....	71	71	18	.....	.....	.....	6	.....	158a
1,077	44	1,121	54	361	.....	361	32	11	.....	.....	.....	.....	87	158b
17,048	785	17,833	1,785	4,973	.....	4,973	965	298	392	896	34	.....	86	158c
1,021	29	1,050	173	111	.....	141	1	8	.....	.....	.....	127	.....	158d
16,391	879	17,183	1,902	1,454	79	1,533	1,015	205	33	401	12	95	237	158e

TABLE IX.—*Days lost, United States Army,*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	XI. MALFORMATION.						
159	Congenital malformations	2,855	2,837	92	2,719	26	2,745
	XV. ILL-DEFINED DISEASES.						
204–205	Not specified or ill-defined	84,199	82,371	4,505	73,189	4,677	77,866
	TOTAL FOR DISEASES	3,276,311	3,218,986	226,639	2,851,231	141,116	2,992,347
	Total for diseases (excluding days for cases admitted prior to 1920)	2,466,998	2,413,227	138,266	2,177,326	97,635	2,274,961
	XIV. EXTERNAL CAUSES.						
165–174	Suicides (all)	26	26	1	25	.....	25
	Accidental traumatisms	384,050	379,110	29,325	338,663	11,122	349,785
175	Poisoning by food	724	724	100	601	23	624
176–177	Other acute poisonings (gas excepted)	1,031	1,018	4	942	72	1,014
178	Conflagrations	219	219	65	154	.....	154
179	Burns (conflagrations excepted)	1,769	1,762	38	1,624	100	1,724
180	Mechanical suffocation	87	87	9	78	.....	78
181	Absorption of irrespirable or poisonous gas	314	311	1	310	.....	310
182	Drowning	7	7	.....	7	.....	7
183	Firearms (wounds of war excepted)	54,651	54,448	2,854	49,404	2,190	51,594
184	Cutting and piercing instruments	26,118	25,038	673	23,188	1,177	24,365
185	Fall	97,249	95,101	6,378	85,403	3,320	88,723
187	Machines	4,224	4,182	6	4,086	90	4,176
188a	Railroad accident	12,732	12,727	716	11,980	31	12,011
188b	Street-car accident	4,049	4,042	36	4,002	4	4,006
188c	Automobile accident	37,843	37,685	3,580	33,438	667	34,105
188d	Balloon and airplane accident	17,636	17,636	7,823	9,813	.....	9,813
188ea	Motor-cycle accident	45,362	45,265	3,866	41,094	305	41,399
188eb	Other vehicles	38,662	38,122	1,182	36,126	814	36,940
188f	Other crushings	21,511	21,349	1,558	19,020	771	19,791
189	Animals (not poisonous)	19,862	19,387	436	17,393	1,558	18,951
193	Excessive cold	1,394	1,394	5	1,387	2	1,389
194	Excessive heat	1,589	1,585	12	1,552	21	1,573
195–196	Accidental electric shocks	612	608	3	601	4	605
197–199	Homicide (all)	72	72	.....	62	10	72
202	Other external violence (cause specified)	58,596	57,131	2,597	52,931	1,603	54,534
202a	Falling objects	20,430	19,942	993	18,359	590	18,949
202b	Jumping from height	3,047	3,001	97	2,585	319	2,904
202d	Splinters	1,563	1,563	10	1,493	60	1,553
202e	Other causes	33,556	32,625	1,497	30,494	634	31,128
203	Other external violence (cause not specified)	129,480	127,397	7,203	115,780	4,414	120,194
203a	Athletic exercises	49,376	48,437	3,079	43,738	1,620	45,358
203b	Drilling and marching	4,823	4,677	279	4,000	398	4,398
203c	Fighting (brawls)	11,508	11,432	2	11,085	345	11,430
203d	Other causes	63,773	62,851	3,843	56,957	2,051	59,008
	Total for diseases	3,276,311	3,218,986	226,639	2,851,231	141,116	2,992,347
	Total for external causes	575,819	567,323	39,146	511,001	17,176	528,177
	Grand total	3,852,130	3,786,309	265,785	3,362,232	158,292	3,520,524
	Excluding days for cases admitted prior to 1920:						
	Total for diseases	2,466,998	2,413,227	138,266	2,177,326	97,635	2,274,961
	Total for external causes	489,262	480,823	30,844	432,856	17,123	449,979
	Grand total	2,956,260	2,894,050	169,110	2,610,182	114,758	2,724,940

1920; absolute numbers—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	910,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
2,555	26	2,581	50	18	.....	18	59	27	10	.....	.....	.....	18	159
57,998	3,498	61,496	4,207	5,824	1,179	7,003	2,628	490	153	1,173	716	275	1,553	204–205
2,077,860	115,540	2,193,400	354,002	215,292	25,576	240,868	62,297	38,088	32,653	49,323	21,716	20,170	37,155	
1,607,469	73,745	1,681,214	195,386	207,969	23,890	231,859	55,126	36,737	31,394	26,381	16,864	19,164	34,607	
24	.....	24	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	165–174
233,102	9,430	242,532	79,086	8,184	1,692	9,876	8,620	4,909	613	3,382	767	1,685	3,255	
305	.....	305	3	240	23	263	16	37	.....	.....	.....	.....	.....	175
730	72	802	132	23	.....	23	27	15	.....	.....	15	.....	13	176–177
77	.....	77	.....	.....	.....	.....	.....	.....	.....	77	.....	.....	.....	178
1,455	7	1,462	82	4	93	97	7	23	.....	19	34	.....	7	179
78	.....	78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	180
289	.....	289	11	4	.....	4	6	.....	.....	.....	.....	.....	3	181
.....	.....	.....	.....	.....	.....	.....	7	.....	.....	.....	.....	.....	.....	182
27,828	2,110	29,938	17,495	922	80	1,002	992	1,121	173	869	4	41	162	183
17,756	952	18,708	2,794	1,153	225	1,378	692	378	111	247	57	446	634	184
58,378	2,666	61,044	17,466	3,454	654	4,108	2,670	1,716	262	862	595	903	1,245	185
3,310	90	3,400	507	51	.....	51	77	65	.....	76	.....	31	11	187
5,751	30	5,781	5,880	20	1	21	.....	1	.....	328	.....	.....	5	188a
2,531	.....	2,531	1,101	63	4	67	5	.....	.....	257	45	.....	7	188b
27,831	604	28,435	4,167	186	63	249	651	388	16	199	.....	46	112	188c
8,231	.....	8,231	1,038	127	.....	127	401	16	.....	.....	.....	.....	.....	188d
23,736	285	24,021	15,357	292	20	312	1,304	400	5	.....	.....	4	93	188ea
25,964	692	26,656	9,106	339	122	461	370	288	.....	59	.....	70	470	188eb
15,081	689	15,770	1,962	693	82	775	765	323	41	138	17	94	68	188fb
13,771	1,233	15,004	1,985	613	325	938	630	138	5	251	.....	50	425	189
529	2	531	.....	76	.....	76	41	.....	.....	736	5	.....	.....	193
1,105	21	1,126	302	43	.....	43	22	15	49	13	3	.....	4	194
428	4	432	151	6	.....	6	16	.....	.....	.....	.....	.....	4	196
1	10	11	61	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	197–199
36,559	1,444	38,003	11,481	1,926	159	2,085	1,790	690	139	196	150	415	1,050	202
13,394	561	13,955	3,847	360	29	389	379	300	8	59	12	172	316	202a
2,202	263	2,465	80	61	56	117	158	68	.....	16	.....	16	30	202b
993	60	1,053	362	59	.....	59	52	.....	.....	27	.....	.....	.....	202d
19,970	560	20,530	7,192	1,446	74	1,520	1,201	322	131	94	138	227	704	202e
82,467	3,133	85,600	21,646	4,300	1,281	5,581	3,414	2,375	660	733	185	934	1,149	203
33,061	1,158	34,219	6,626	1,088	462	1,550	1,606	1,068	119	115	55	527	412	203a
2,926	206	3,132	322	219	192	411	509	21	2	1	.....	28	118	203b
6,688	299	6,987	3,145	728	46	774	206	173	30	89	26	9	67	203c
39,792	1,470	41,262	11,553	2,263	581	2,846	1,093	1,113	509	528	104	370	552	203d
2,077,860	115,540	2,193,400	354,002	215,292	25,576	240,868	62,297	38,088	32,653	49,323	21,716	20,170	37,155	
354,215	14,044	368,259	112,727	14,536	3,132	17,668	13,903	7,989	1,461	5,060	1,110	3,034	5,462	
2,432,075	129,584	2,561,659	466,729	229,828	28,708	258,536	76,200	46,077	34,114	54,383	22,826	23,204	42,617	
1,607,469	73,745	1,681,214	195,386	207,969	23,890	231,859	55,126	36,737	31,394	26,381	16,864	19,164	34,607	
324,197	14,044	338,241	67,125	14,463	3,079	17,542	13,319	7,776	1,336	3,653	987	3,034	5,405	
1,931,666	87,789	2,019,455	262,511	222,432	26,969	249,401	68,445	44,513	32,730	30,034	17,851	22,198	40,012	

TABLE IX.—*Days lost, United States Army,*

Office classification numbers.	Disease.	Total United States Army.					
	Mean strength	209,565	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	XIV. EXTERNAL CAUSES—continued.						
	The following are included above: Diagnoses of injuries—						
1	Abrasions and blisters	17,416	16,530	399	15,632	499	16,131
2	Anaphylaxis	147	147	.....	147	.....	147
3	Concussion (brain)	2,045	2,037	269	1,742	26	1,768
4	Contusion	34,495	33,641	1,284	30,876	1,481	32,357
5	Crushing	6,814	6,810	507	6,235	68	6,303
6	Dermatitis	4,522	4,471	196	4,268	7	4,275
7	Dislocation of joint	10,653	10,587	1,080	9,157	350	9,507
8	Dislocation of articular cartilage of knee	2,824	2,805	424	2,381	.....	2,381
9	Epiphyseal separation	838	838	86	734	18	752
10	Eye and annexa, traumatisms	2,152	2,025	61	1,698	266	1,964
11	Foreign body	2,881	2,864	6	2,669	189	2,858
12	Fracture, simple	180,580	178,545	15,697	159,354	3,494	162,848
13	Fracture, compound	89,090	88,575	7,518	78,983	2,074	81,057
14	Fracture, faulty union	567	567	82	466	19	485
15	Hemorrhage, and results	1,253	1,250	249	1,001	.....	1,001
16	Secondary result of injuries	4,195	4,169	529	3,612	28	3,640
17	Sprain of joint	49,031	48,002	2,185	43,837	1,980	45,817
18	Strain	6,427	6,328	407	5,662	259	5,921
19	Synovitis, traumatic, cause not specified	8,345	8,336	539	7,606	191	7,797
20	Wounds, multiple	7,305	7,304	1,090	6,129	85	6,214
21	Wounds, penetrating	10,567	10,533	332	9,818	383	10,201
22	Wounds, perforating	12,747	12,657	532	11,748	377	12,125
23	Wounds, others	83,841	81,737	2,732	74,418	4,587	79,005

1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Office classification number.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
11,196	145	11,341	2,825	518	354	872	458	370	80	111	74	312	574	1
138	.....	138	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
958	26	984	598	17	.....	17	156	13	.....	.....	.....	8	.....	3
25,913	1,056	26,969	2,165	603	425	1,028	1,478	356	143	90	128	401	453	4
4,087	67	4,154	2,124	1	1	2	.....	7	.....	16	.....	.....	4	5
3,459	7	3,466	136	264	.....	264	195	115	34	8	57	.....	51	6
6,489	189	6,678	1,713	439	161	600	265	94	8	18	131	21	45	7
1,711	.....	1,711	648	11	.....	11	.....	11	.....	.....	.....	19	.....	8
603	18	621	49	11	.....	11	71	.....	.....	.....	.....	.....	.....	9
1,258	201	1,459	206	87	65	152	123	18	2	4	.....	.....	127	10
1,906	189	2,095	279	187	.....	187	95	12	159	31	.....	17	.....	11
115,404	2,771	118,175	32,027	2,721	723	3,444	4,399	3,166	23	1,404	210	1,118	917	12
39,075	1,987	41,062	35,104	1,738	87	1,825	1,261	990	6	804	5	.....	521	13
426	19	445	.....	.....	.....	.....	40	.....	.....	.....	.....	.....	.....	14
580	.....	580	173	35	.....	35	33	52	125	3	.....	.....	3	15
2,621	28	2,649	385	197	.....	197	148	37	175	49	.....	18	8	16
31,821	1,632	33,453	6,852	2,226	348	2,574	1,572	680	237	340	109	272	757	17
4,451	137	4,588	303	361	122	483	395	102	27	7	16	56	43	18
4,725	185	4,910	2,602	33	6	39	94	22	.....	130	.....	5	4	19
3,503	78	3,581	2,141	281	7	288	150	18	35	1	.....	.....	1	20
6,566	380	6,946	2,408	136	3	139	532	13	.....	163	.....	.....	34	21
6,984	372	7,356	3,586	146	5	151	192	333	120	387	.....	7	83	22
57,990	3,967	61,957	9,957	2,822	620	3,442	1,654	1,033	224	466	272	656	1,448	23

TABLE X.—*Noneffective rates for days lost.*

Numbers of international classification	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	0.02	0.02	0.06	0.02	0.02	0.02
2	Typhus fever	.01	.01	.01	.01	.....	.01
3	Relapsing fever	.00	.00	.....	.00	.....	.00
	Malarial fevers (all)	.31	.28	.10	.30	.27	.29
5a	Malarial fever, estivo-autumnal	.04	.04	.02	.04	.03	.04
5b	Malarial fever, quartan	.00	.00	.....	.00	.....	.00
5c	Malarial fever, tertian	.25	.23	.07	.25	.22	.25
5d	Malarial fever, unclassified	.01	.01	.01	.01	.01	.01
6	Smallpox	.02	.02	.....	.03	.01	.03
7	Measles	.74	.76	.03	.86	.02	.82
8	Scarlet fever	.13	.13	.03	.15	.02	.14
9	Whooping cough	.01	.01	.01	.01	.....	.01
10	Diphtheria	.09	.09	.06	.10	.01	.10
11	Influenza	2.43	2.52	1.66	2.65	1.39	2.58
11a	Influenza, with pneumonia	.46	.47	.18	.52	.12	.50
11b	Influenza, without pneumonia	1.97	2.04	1.48	2.13	1.27	2.09
13	Mumps	.50	.47	.09	.52	.12	.50
16	Dysentery (all)	.11	.10	.14	.10	.04	.10
16a	Dysentery, amebic	.09	.09	.10	.09	.03	.09
16b	Dysentery, bacillary	.00	.00	.....	.00	.01	.00
16c	Dysentery, unspecified or others	.02	.01	.04	.01	.01	.01
21	Erysipelas	.02	.02	.04	.02	.01	.02
24	Meningococcus meningitis	.06	.07	.00	.07	.....	.07
25a	Chicken pox	.06	.05	.03	.05	.15	.06
25b	German measles	.01	.01	.00	.01	.....	.01
25ca	Dengue	.23	.23	.14	.25	.02	.24
25cb	Febricula and undetermined fevers	.07	.07	.03	.07	.02	.07
25cc	Typhoid vaccination	.13	.14	.01	.15	.07	.15
25cd	Vaccinia	.14	.14	.00	.16	.02	.16
25ce	Carrier, epidemic diseases	.07	.08	.09	.08	.00	.07
25cf	Other epidemic diseases	.00	.00	.....	.00	.....	.00
27	Anthrax	.00	.00	.....	.00	.00	.00
30	Mycoses	.02	.02	.02	.02	.08	.02
31	Tuberculosis of the respiratory system	4.84	5.00	15.42	4.03	7.30	4.20
32–36	Tuberculosis of the other organs	.49	.51	.48	.47	1.34	.51
37	Disseminated tuberculosis	.01	.01	.....	.01	.02	.01
	Tuberculosis (all)	5.34	5.52	15.90	4.51	8.65	4.72
38	Syphilis	1.84	1.87	1.25	1.89	2.55	1.92
39	Soft chancre	1.59	1.61	.06	1.62	3.78	1.73
40	Gonococcus infection	5.69	5.87	.53	6.33	5.35	6.28
	Venereal diseases (all)	9.11	9.35	1.84	9.84	11.69	9.93
41	Purulent infection, septicemia	.00	.00	.....	.00	.....	.00
42	Other infectious diseases	.01	.01	.01	.01	.00	.01
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	10	.11	.38	.08	.23	.08
50	Benign tumors	.13	.14	.15	.13	.18	.14
51	Acute rheumatic fever	.19	.19	.10	.19	.33	.20
52b	Osteoarthritis	.72	.74	.81	.76	.36	.74
54	Pellagra	.00	.00	.....	.00	.....	.00
55	Beriberi	.01	.00	.00	.....	.....	.....
56	Rickets	.02	.02	.....	.02	.03	.02
57	Diabetes mellitus	.04	.04	.23	.03	.....	.03
58a	Pernicious anemia	.00	.00	.00	.01	.....	.01
58b	Other anemias and chlorosis	.01	.01	.04	.01	.....	.01
59	Diseases of the pituitary gland	.00	.00	.....	.00	.....	.00

United States Army, 1920; ratios per 1,000.

American troops (enlisted men).											Native troops, enlisted men.		Numbers of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.01	0.02	0.01	0.06	.....	.....	.....	.....	.....	.....	0.34	0.06	.....	.....	1a
.....	.....	.....	.....	0.01	.....	0.01	.....	.....	.....	1.59	.01	.....	.....	2
.00	.....	.00	.....	.....	.....	.....	.....	0.01	.....	.....	.....	.....	.....	3
.30	.05	.28	.05	.36	1.25	.50	.06	1.48	.08	.....	.07	.81	.96	
.02	.....	.02	.00	.02	0.19	.05	.....	.70	.....	.....	.....	0.17	0.18	5a
.00	.....	.00	.....	.....	.....	.....	.....	.01	.....	.....	.....	.....	.01	5b
.26	.04	.25	.05	.33	1.02	.44	0.05	.77	0.08	.....	.06	.63	.75	5c
.01	.01	.01	.00	.01	.04	.01	.01	.....	.....	.....	.01	.01	.02	5d
.03	.02	.03	.....	.....	.....	.....	.01	.....	.06	.23	.11	.04	.....	6
.97	.02	.92	.64	.29	.....	.24	.10	.29	.14	1.32	.52	.35	.16	7
.14	.02	.13	.26	.07	.....	.06	.02	.....	1.31	.22	.40	.....	.....	8
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
.09	.01	.09	.26	.02	.....	.02	.04	.02	.....	.21	.....	.....	.....	10
2.98	1.69	2.93	2.64	.46	.03	.39	.24	.09	.03	2.99	1.96	1.22	.17	11
.57	.14	.55	.58	.05	.....	.04	.15	.02	.....	.43	.51	.13	.05	11a
2.41	1.55	2.37	2.06	.40	.03	.34	.09	.07	.03	2.56	1.45	1.10	.13	11b
.45	.14	.43	.59	.75	.03	.63	.09	.84	.04	7.98	1.20	1.99	.87	13
.03	.02	.02	.02	1.27	.13	1.08	.16	.04	1.29	.11	.16	.....	.37	16
.02	.01	.01	.02	1.19	.10	1.01	.16	.04	1.29	.11	.12	.....	.29	16a
.00	.01	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16b
.01	.....	.01	.00	.08	.03	.07	.....	.00	.....	.....	.04	.....	.08	16c
.02	.01	.02	.04	.04	.....	.03	.....	.00	.16	.08	.01	.....	.01	21
.06	.....	.06	.16	.06	.....	.05	.....	.12	.17	.54	.40	.....	.....	24
.05	.13	.05	.08	.02	.22	.05	.04	.01	.27	.05	.....	.32	.15	25a
.01	.....	.01	.00	.01	.....	.01	.....	.....	.....	.....	.....	.....	.02	25b
.00	.....	.00	.....	4.92	.09	4.13	.....	.00	.03	.....	.08	.01	.31	25ca
.05	.03	.05	.01	.48	.....	.40	.02	.14	.....	.26	.20	.09	.26	25cb
.19	.09	.18	.01	.03	.....	.02	.04	.02	.01	.13	.02	.14	.01	25cc
.20	.02	.19	.02	.00	.....	.00	.03	.04	.06	.04	.....	.12	.....	25cd
.09	.00	.09	.04	.01	.....	.01	.05	.06	.02	.08	.01	.....	.00	25ce
.....	.....	.....	.....	.....	.....	.....	.....	.02	.....	.....	.....	.....	.....	25cf
.00	.....	.00	.....	.....	.00	.00	.....	.....	.....	.....	.....	.....	.....	27
.01	.10	.01	.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.01	30
4.57	7.99	4.75	2.51	2.43	4.23	2.72	.79	.86	1.13	5.47	1.07	1.86	1.15	31
.49	1.63	.55	.60	.21	.02	.18	.35	.04	.19	.81	.44	.01	.10	32–36
.01	.01	.01	.02	.....	.07	.01	.....	.....	.....	.15	.....	.....	.....	37
5.07	9.63	5.31	3.13	2.64	4.31	2.91	1.14	.90	1.31	6.42	1.50	1.88	1.25	
1.53	2.90	1.60	4.84	2.72	.99	2.44	.79	.69	4.65	8.32	1.26	4.62	.24	38
.94	2.59	1.03	3.97	5.94	9.12	6.46	.38	1.28	10.83	19.12	1.78	4.28	.29	39
4.10	4.17	4.09	19.53	15.97	10.65	15.10	4.90	1.92	28.80	30.36	6.15	1.76	1.52	40
6.56	9.66	6.73	28.34	24.65	20.76	24.01	6.07	3.90	44.28	57.80	9.19	10.66	2.05	
.00	.....	.00	.06	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
.01	.....	.01	.05	.....	.01	.00	.....	.....	.....	.00	.....	.16	.....	42
.08	.28	.09	.03	.01	.....	.00	.00	.31	.....	.....	.03	.....	.03	43–49
.13	.19	.13	.13	.20	.10	.19	.22	.05	.17	.18	.....	.02	.09	50
.18	.40	.19	.38	.17	.....	.14	.05	.11	.37	.04	.44	.09	.01	51
.72	.43	.70	1.12	.77	.05	.65	1.04	.16	.91	2.75	.30	.31	.09	52b
.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.02	.33	55
.02	.01	.02	.03	.04	.11	.05	.04	.....	.....	.26	.....	.....	.02	56
.03	.....	.03	.....	.04	.....	.03	.....	.09	.....	.05	.....	.....	.02	57
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58a
.01	.....	.01	.04	.00	.....	.00	.....	.....	.....	.....	.....	.....	.01	58b
.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59

TABLE X.—*Noneffective rates for days lost, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,320	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	II. GENERAL DISEASES NOT INCLUDED ABOVE—continued.						
60a	Exophthalmic goiter	0.13	0.13	0.16	0.13	0.04	0.13
60ba	Goiter, simple	.05	.05	.05	.05	.....	.05
61-65	Other diseases of ductless glands	.01	.01	.02	.01	.....	.01
66	Alcoholism (acute or chronic)	.14	.15	.05	.16	.03	.15
67a	Chronic lead poisoning	.00	.00	.....	.00	.....	.00
68a	Drug addiction	.05	.05	.01	.06	.02	.06
68b	Chronic poisoning by other organic substances.	.00	.00	.....	.00	.....	.00
69	Other general diseases	.11	.11	.13	.11	.10	.11
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	.02	.03	.11	.02	.....	.02
71	Simple meningitis	.00	.00	.01	.00	.00	.00
72	Tabes dorsalis	.00	.00	.01	.00	.01	.00
73	Other diseases of the spinal cord	.03	.03	.03	.04	.....	.04
74	Cerebral hemorrhage, apoplexy	.01	.01	.00	.01	.01	.01
75a	Hemiplegia	.02	.02	.06	.01	.02	.01
75ba	Facial paralysis	.02	.02	.02	.02	.01	.02
75bb	Other paralysis without specified cause	.04	.04	.09	.04	.....	.03
76	General paralysis of the insane	.08	.08	.16	.08	.02	.07
77a	Constitutional psychopathic state	.37	.39	.12	.43	.04	.41
77b	Mental deficiency	.33	.34	.....	.38	.14	.37
77c	Dementia præcox	1.03	1.08	.16	1.17	.65	1.15
77d	Pyschasthenia	.03	.03	.24	.01	.....	.01
77e	Psychoneurosis	.28	.30	.72	.27	.06	.26
77f	Psychosis, alcoholic	.03	.03	.00	.04	.01	.04
77g	Psychosis, manic depressive	.21	.22	.19	.23	.05	.23
77h	Other forms of mental alienation	.15	.16	.06	.17	.14	.17
78	Epilepsy	.28	.29	.03	.32	.15	.31
79	Convulsions (nonepileptic)	.01	.01	.....	.01	.01	.01
81	Chorea	.02	.02	.....	.02	.02	.02
82a	Hysteria and results (psychoses excepted)	.19	.20	.12	.21	.14	.21
82b	Neuralgia	.03	.03	.04	.03	.03	.03
82c	Neuritis	.16	.14	.38	.12	.10	.12
84a	Neurasthenia	.28	.29	.82	.26	.10	.25
84b	Neuro circulatory asthenia	.03	.03	.06	.03	.....	.03
84c	Other diseases of the nervous system	.26	.27	.15	.28	.20	.28
	B. Organs of special sense.						
85	The eye and annexa	.71	.73	.76	.72	.94	.73
85a	Refractive error	.09	.09	.05	.10	.02	.09
85b	Trachoma	.07	.08	.01	.09	.03	.08
85c	Conjunctivitis (others)	.12	.12	.08	.12	.14	.12
85d	Iritis	.07	.07	.06	.06	.19	.07
85e	Keratitis	.07	.07	.15	.07	.02	.07
85f	Eyelids, diseases of	.03	.03	.03	.03	.07	.03
85g	Eye and annexa, other diseases of	.27	.27	.38	.25	.48	.26
86	The ear and the mastoid process	.67	.70	.55	.73	.38	.71
86aa	Otitis media	.57	.59	.46	.61	.34	.60
86ab	Otitis externa	.03	.03	.02	.04	.00	.04
86ac	Defective hearing, cause not stated	.01	.01	.03	.01	.....	.01
86ad	Ear, other diseases of	.02	.02	.03	.02	.00	.02
86b	Mastoiditis	.05	.05	.02	.05	.03	.05

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.12	0.05	0.12	0.05	0.47	0.01	0.39	0.26	.....	.....	0.16	0.23	.....	0.06	60a
.04	.....	.04	.01	.15	.....	.13	.20	0.02	0.06	.46	.....	.....	.03	60ba
.01	.....	.01	.....	.01	.....	.01	.....	.02	.....	.05	.....	.....	.....	61–65
.09	.03	.08	.64	.36	.04	.30	.20	.26	.39	.89	.02	0.00	.00	66
.00	.....	.00	.....	.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	67a
.05	.02	.05	.08	.10	1.01	.09	.01	.13	.....	.02	.04	.....	.....	68a
.00	.....	.00	.....	.....	.....	.....	.....	.....	.01	.....	.....	.....	.....	68b
.11	.12	.11	.18	.07	.02	.06	.16	.01	.37	.....	.02	.12	.04	69
.02	.....	.01	.08	.00	.....	.00	.....	.04	.....	.....	.....	.....	.....	70
.00	.00	.00	.01	.01	.....	.01	.....	.01	.....	.12	.....	.....	.....	71
.00	.01	.00	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.02	72
.04	.....	.04	.05	.08	.....	.07	.....	.....	.....	.....	.....	.04	.....	73
.01	.....	.01	.....	.00	.07	.01	.....	.....	.....	.....	.....	.....	.....	74
.01	.03	.01	.06	.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	75a
.02	.01	.02	.02	.....	.....	.....	.....	.....	.....	.11	.....	.02	.....	75ba
.03	.....	.03	.06	.07	.....	.05	.04	.00	.16	.....	.....	.....	.01	75bb
.09	.03	.09	.02	.01	.....	.01	.....	.10	.....	.....	.....	.....	.....	76
.41	.05	.39	.43	.65	.01	.55	.44	.47	.22	1.11	.19	.....	.03	77a
.37	.07	.35	.22	.75	.42	.70	.61	.06	.....	2.19	.33	.....	.00	77b
1.20	.70	1.18	.97	.89	.43	.82	.81	1.25	.52	2.28	2.61	.09	.06	77c
.01	.....	.01	.01	.01	.....	.01	.07	.03	.....	.01	.....	.....	.....	77d
.23	.01	.22	.28	.75	.27	.67	.71	.17	.70	.66	.09	.....	.....	77e
.03	.01	.03	.11	.09	.00	.08	.09	.....	.01	.....	.07	.....	.....	77f
.26	.07	.25	.24	.02	.....	.01	.18	.09	.....	.....	.01	.....	.02	77g
.13	.14	.13	.19	.53	.12	.46	.18	.58	.....	.01	.06	.04	.04	77h
.30	.19	.29	.50	.54	.....	.45	.07	.08	.06	.46	.18	.....	.01	78
.01	.01	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
.02	.02	.02	.08	.....	.....	.....	.01	.08	.....	.....	.....	.....	.....	81
.23	.16	.22	.16	.05	.01	.04	.29	.06	.13	.82	.21	.02	.....	82a
.03	.03	.03	.03	.02	.01	.02	.01	.02	.02	.....	.01	.06	.01	82b
.12	.12	.12	.23	.06	.....	.05	.06	.01	.18	.56	.09	[1] 2.83	.....	82c
.26	.12	.25	.37	.23	.....	.19	.15	.15	.11	.57	.....	.01	.02	84a
.02	.....	.02	.03	.12	.....	.10	.08	.08	.08	.18	.03	.14	.....	84b
.29	.24	.28	.18	.23	.04	.20	.66	.08	.00	.29	.45	.01	.00	84c
.73	.80	.73	.38	1.03	1.56	1.11	1.31	.64	.53	.67	.09	.91	.18	85
.08	.02	.08	.02	.24	.02	.21	.64	.06	.01	.03	.02	.20	.01	85a
.10	.03	.10	.03	.00	.....	.00	.....	.07	.....	.....	.01	.....	.....	85b
.13	.16	.13	.13	.09	.04	.08	.09	.07	.12	.15	.01	.15	.08	85c
.07	.21	.08	.03	.05	.10	.06	.03	.08	.....	.....	.01	.07	.01	85d
.08	.03	.08	.02	.00	.....	.00	.05	.00	.03	.14	.....	.05	.03	85e
.02	.00	.02	.06	.05	.38	.11	.02	.01	.....	.01	.....	.....	.01	85f
.24	.35	.25	.09	.58	1.02	.66	.48	.34	.37	.33	.04	.44	.05	85g
.73	.38	.71	.61	1.15	.35	1.02	.53	.62	.56	1.78	.20	.25	.04	86
.62	.34	.60	.53	.89	.35	.80	.37	.48	.52	1.64	.17	.23	.02	86aa
.02	.00	.02	.01	.21	.....	.17	.15	.13	.04	.08	.01	.02	.01	86ab
.01	.....	.01	.....	.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	86ac
.02	.....	.02	.00	.01	.01	.01	.01	.01	.....	.06	.....	.00	.00	86ad
.06	.04	.06	.07	.04	.....	.03	.....	.00	.....	.....	.02	.....	.....	86b

[1] See page 85.

TABLE X.—*Noneffective rates for days lost, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
87	Pericarditis	0.01	0.01	.....	0.01	0.03	0.01
88	Endocarditis and myocarditis (acute)	.01	.01	0.01	.01	.02	0.1
89	Angina pectoris	.00	.00	.01	.00	.....	.00
90a	Valvular diseases of the heart	.33	.34	.44	.34	.17	.33
90aa	Aortic insufficiency	.03	.03	.05	.03	.04	.03
90ab	Aortic stenosis	.01	.01	.01	.01	.....	.01
90ac	Mitral insufficiency	.22	.23	.30	.23	.09	.22
90ad	Mitral stenosis	.04	.04	.01	.04	.02	.04
90ae	Other valvular diseases	.03	.03	.06	.03	.03	.03
90b	Cardiac hypertrophy and dilatation	.01	.01	.00	.01	.02	.01
90c	Myocarditis, chronic	.10	.10	.30	.08	.08	.08
90d	Other diseases of the heart (organic)	.03	.03	.00	.03	.02	.03
91a	Aneurysm	.00	.00	.....	.00	.02	.00
91b	Arteriosclerosis	.05	.06	.46	.02	.04	.03
91c	Other diseases of the arteries	.01	.01	.....	.00	.06	.01
92	Embolism and thrombosis (not cerebral)	.01	.01	.00	.01	.06	.01
93a	Hemorrhoids	.23	.24	.30	.23	.37	.24
93b	Varicocele	.10	.10	.04	.11	.00	.11
93c	Varicose veins	.06	.07	.08	.06	.08	.07
93d	Phlebitis	.01	.01	.04	.01	.01	.01
94	Diseases of the lymphatic system	.34	.34	.06	.35	.63	.37
95	Hemorrhage without specified cause	.01	.01	.02	.00	.00	.00
96a	Cardiac arrhythmia	.02	.02	.02	.02	.....	.02
96b	Cardiac disorder, functional	.08	.09	.10	.09	.05	.09
96c	Tachycardia	.06	.07	.06	.07	.09	.07
96d	Other diseases of the circulatory system	.01	.01	.00	.01	.00	.01
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa	.63	.65	.91	.65	.22	.63
97a	Deviation of nasal septum, and spurs	.14	.14	.22	.14	.00	.14
97b	Turbinate hypertrophy	.02	.02	.02	.02	.00	.02
97c	Sinusitis	.15	.16	.32	.15	.07	.14
97d	Rhinitis	.29	.30	.23	.32	.14	.31
97e	Nasal fossæ, other diseases of	.03	.03	.12	.03	.00	.03
98	Diseases of the larynx (all)	.07	.07	.13	.07	.06	.07
98a	Laryngitis, acute catarrhal	.07	.07	.13	.07	.05	.07
98b	Larynx, other diseases of	.00	.00	.....	.00	.01	.00
99	Bronchitis	1.78	1.81	1.79	1.84	1.23	1.81
100	Pneumonia, broncho	.28	.28	.10	.30	.13	.30
101a	Pneumonia, lobar	.31	.31	.13	.32	.37	.33
101b	Pneumonia, not otherwise defined	.05	.05	.04	.06	.....	.06
102a	Pleurisy, suppurative	.26	.27	.24	.27	.44	.28
102b	Pleurisy, serofibrinous	.12	.12	.13	.12	.06	.12
102c	Pleurisy, others	.23	.24	.25	.23	.39	.23
105	Asthma	.14	.14	.12	.14	.15	.14
107	Other diseases of the respiratory system	.02	.02	.05	.02	.00	.02
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).						
108a	Pyorrhea alveolaris	.04	.04	.17	.03	.00	.03
108b	Other diseases of the mouth and annexa	.15	.15	.37	.13	.09	.13
109a	Adenoid vegetation	.01	.01	.....	.01	.00	.01
109ba	Pharyngitis, acute catarrhal	.30	.31	.17	.34	.07	.32
109bb	Pharynx, other diseases of	.23	.24	.07	.25	.13	.25
109bc	Tonsillitis, acute, follicular	1.43	1.49	.65	1.59	.94	1.55
109bd	Tonsillitis, chronic	.30	.31	.49	.30	.13	.30
109be	Other diseases of the pharynx and tonsils	.09	.10	.11	.10	.04	.10
110	Diseases of the œsophagus	.00	.00	.....	.00	.....	.00
111a	Ulcer of the stomach	.07	.07	.10	.07	.06	.07
111b	Ulcer of the duodenum	.04	.04	.15	.04	.02	.03
112	Other diseases of the stomach (cancer excepted).	.34	.35	.44	.35	.30	.35
114a	Diarrhea (cause not stated)	.05	.05	.07	.05	.07	.05
114b	Enteritis and colitis	.17	.17	.27	.16	.09	.16

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transport.			
139,153	7,764	146,917	15,219	8,841	1,733	910,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.01	0.04	0.01	0.01	0.01	.....	0.01	.....	.....	.....	.....	.....	.....	.....	87
.01	.03	.01	.03	.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	88
.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	.....	0.01	.....	.....	89
.32	.19	.31	.33	.65	0.10	.56	0.50	0.01	0.81	1.52	.21	.....	0.02	90a
.03	.05	.03	.01	.12	.....	.10	.01	.....	.....	.....	.....	.....	.....	90aa
.01	.....	.01	.02	.....	.....	.....	.....	.....	.02	.....	.....	.....	.02	90ab
.22	.10	.22	.23	.31	.01	.26	.22	.01	.18	1.47	.21	.....	.01	90ac
.04	.03	.04	.04	.09	.....	.07	.....	.....	.61	.05	.....	.....	.....	90ad
.02	.01	.02	.03	.13	.09	.13	.27	.....	.....	.....	.....	.....	.....	90ae
.02	.02	.02	.00	.02	.02	.02	.00	.....	.....	.....	.....	.....	.01	90b
.07	.10	.07	.13	.22	.00	.19	.11	.01	.48	.....	.23	0.05	.....	90c
.04	.01	.04	.05	.....	.09	.01	.01	.....	.....	.19	.....	.....	.....	90d
.00	.02	.00	.01	.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	91a
.01	.05	.01	.01	.28	.02	.24	.....	.....	.....	.....	.....	.....	.....	91b
.00	.08	.01	.01	.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	91c
.01	.07	.01	.....	.....	.....	.....	.00	.....	.....	.....	.....	.....	.....	92
.24	.40	.25	.20	.24	.22	.24	.08	.18	.11	.42	.....	.02	.02	93a
.12	.00	.11	.08	.16	.....	.13	.08	.20	.....	.16	.....	.....	.02	93b
.07	.09	.07	.02	.06	.00	.05	.11	.....	.10	.11	.....	.....	.00	93c
.01	.....	.01	.02	.....	.04	.01	.....	.....	.....	.....	.....	.03	.....	93d
.31	.65	.33	.34	.80	.33	.72	.03	.68	2.36	.43	.11	.74	.24	94
.00	.00	.00	.01	.....	.....	.....	.00	.....	.....	.....	.....	.....	.01	95
.01	.....	.01	.00	.18	.....	.15	.06	.07	.05	.05	.09	.....	.....	96a
.07	.06	.07	.01	.53	.....	.45	.10	.....	.31	.37	.....	.....	.....	96b
.07	.06	.07	.03	.12	.23	14	.10	.02	.04	.07	.....	.....	.00	96c
.01	.00	.01	.01	.01	.....	.00	.02	.....	.....	.....	.01	.00	.00	96d
.70	.20	.67	.43	.53	.32	.49	.91	.40	.53	.56	.05	.47	.08	97
.16	.00	.15	.04	.16	.....	.14	.26	.09	.07	.04	.....	.03	.00	97a
.02	.00	.02	.00	.03	.....	.03	.06	.01	.....	.....	.....	.....	.02	97b
.15	.08	.15	.13	.08	.00	.06	.19	.09	.22	.46	.03	.35	.01	97c
.34	.11	.33	.24	.25	.32	.26	.31	.21	.14	.06	.02	.10	.06	97d
.03	.01	.03	.02	.00	.....	.00	.08	.01	.10	.....	.....	.....	.....	97e
.08	.07	.08	.06	.02	.00	.02	.02	.01	.15	.47	.01	.07	.03	98
.07	.06	.07	.06	.02	.00	.02	.02	.01	.15	.47	.....	.07	.03	98a
.00	.01	.00	.....	.....	.....	.....	.....	.....	.....	.....	.01	.....	.....	98b
1.64	1.23	1.61	2.68	2.63	1.28	2.41	1.90	1.38	2.61	11.54	1.66	3.14	.66	99
.26	.14	.26	.56	.19	.06	.17	.24	.06	.26	4.47	.25	.....	.22	100
.29	.45	.30	.51	.39	.01	.33	.24	.05	.99	1.29	.73	.24	.23	101a
.05	.....	.06	.20	.....	.....	.....	.....	.....	.....	.03	.....	.....	.....	101b
.25	.54	.26	.74	.09	.....	.08	.07	.....	.....	.05	.....	.....	.....	102a
.10	.07	.10	.31	.10	.05	.09	.19	.07	.06	.11	.11	.05	.06	102b
.20	.41	.21	.49	.39	.30	.37	.15	.11	.18	.20	.07	.11	.07	102c
.15	.17	.15	.02	.10	.05	.10	.48	.15	.32	.04	.11	.14	.07	105
.03	.....	.02	.00	.02	.02	.02	.....	.02	.....	.....	.07	.....	.01	107
.03	.00	.03	.05	.04	.....	.04	.08	.01	.01	.16	.03	.01	.00	108a
.14	.10	.13	.19	.07	.08	.07	.09	.08	.18	.17	.06	.13	.10	108b
.01	.00	.01	.....	.00	.....	.00	.00	.00	.....	.....	.01	.....	.....	109a
.39	.09	.37	.05	.14	.06	.13	.20	.15	.59	.21	.11	.22	.05	109ba
.23	.05	.22	.59	.21	.47	.26	.01	.13	.53	.32	.01	.....	.02	109bb
1.72	1.11	1.85	1.58	.56	.17	.50	.85	.79	.93	2.76	.54	.31	.04	109bc
.31	.10	.30	.18	.42	.26	.39	.38	.16	.16	.17	.42	.04	.01	109bd
.09	.04	.09	.16	.07	.05	.07	.12	.03	.18	.46	.02	.....	.00	109be
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	110
.06	.07	.07	.15	.....	.....	.....	.08	.05	.....	.....	.17	.....	.....	111a
.03	.....	.03	.08	.....	.11	.02	.08	.06	.....	.....	.03	.....	.....	111b
.34	.34	.34	.37	.40	.14	.36	.58	.23	.17	.44	.11	.37	.11	112
.04	.03	.03	.06	.15	.22	.16	.02	.01	.43	.20	.11	.....	.05	114a
.16	.11	.16	.15	.24	.00	.20	.25	.06	.14	.....	.01	1.19	.14	114b

TABLE X.—*Noneffective rates for days lost, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,197	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED)—continued.						
115	Ankylostomiasis	0.05	0.04	0.00	0.04	0.01	0.04
116	Other intestinal parasites	.03	.02	.02	.02	.03	.02
117	Appendicitis, and typhlitis	.68	.71	.71	.70	.81	.71
118a	Hernia	.77	.80	1.25	.78	.48	.77
118b	Intestinal obstruction	.01	.01	.05	.01	.00	.01
119a	Fistula in ano	.06	.06	.10	.06	.08	.06
119b	Other diseases of the intestines	.54	.53	.63	.51	.69	.52
123	Biliary calculi	.01	.01	.03	.00	.....	.00
124a	Cholecystitis	.06	.06	.11	.05	.05	.05
124b	Other diseases of the liver	.10	.10	.13	.10	.10	.10
127	Other diseases of the digestive system	.08	.09	.18	.08	.08	.08
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	.02	.02	.07	.02	.02	.02
129	Chronic nephritis	.15	.15	.33	.14	.09	.14
131a	Pyogenic infection of the kidney	.07	.07	.12	.07	.01	.07
131b	Other diseases of the kidney and annexa	.04	.04	.14	.03	.02	.03
132a	Nephrolithiasis	.03	.03	.11	.03	.00	.02
132b	Vesical calculi	.01	.01	.02	.01	.00	.01
133a	Cystitis	.07	.07	.13	.07	.11	.07
133b	Other diseases of the bladder	.02	.02	.04	.02	.07	.02
134a	Stricture of the urethra (nonvenereal)	.01	.01	.03	.01	.02	.01
134b	Urethritis (nonvenereal)	.05	.06	.02	.06	.02	.06
135	Diseases of the prostate	.01	.01	.04	.01	.01	.01
136a	Balanitis	.02	.03	.....	.03	.02	.03
136b	Epididymitis	.04	.04	.05	.04	.05	.04
136c	Hydrocele	.04	.04	.05	.04	.03	.04
136d	Warts, external genital organs	.03	.03	.01	.03	.04	.03
136e	Other nonvenereal diseases of the male genital organs	.05	.05	.08	.05	.08	.05
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152a	Carbuncle	.05	.05	.16	.04	.01	.04
152b	Furuncle	.25	.25	.12	.27	.07	.26
153a	Acute abscess	.24	.23	.10	.24	.25	.24
153b	Cellulitis	.23	.23	.09	.26	.13	.24
154a	Trichophytosis	.13	.12	.02	.13	.13	.13
154b	Nails, defects and diseases of	.16	.16	.01	.17	.10	.17
154c	Ectoparasites	.01	.02	.00	.02	.00	.02
154d	Eczema	.09	.09	.11	.09	.05	.09
154e	Erythema	.01	.01	.00	.01	.....	.01
154f	Herpes	.04	.04	.01	.04	.01	.04
154g	Impetigo	.07	.07	.02	.08	.00	.08
154h	Psoriasis	.03	.03	.07	.03	.00	.03
154i	Scabies	.56	.58	.07	.66	.04	.62
154j	Other diseases of the skin and cellular tissue	.29	.31	.17	.31	.28	.31
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155a	Osteomyelitis	.13	.14	.08	.13	.39	.15
155b	Other diseases of the bone	.06	.05	.10	.05	.12	.05
155c	Fractures, faulty union of	.06	.06	.00	.06	.05	.06
156a	Ankylosis of joints	.03	.04	.04	.03	.05	.04
156b	Other diseases of the joints	.07	.07	.09	.06	.20	.07
158a	Hallux valgus	.04	.05	.02	.05	.03	.05
158b	Myositis	.02	.02	.01	.02	.01	.02
158c	Pes planus	.36	.37	.06	.41	.23	.40
158d	Tenosynovitis	.02	.02	.01	.02	.01	.02
158e	Other diseases of the organs of locomotion	.32	.33	.30	.33	.72	.33

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.		
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.05	0.01	0.05	0.00	0.09	0.02	0.08	0.05	.....	.....	.....	0.04	0.11	0.34	115
.02	.....	.02	.02	.06	.15	.08	.01	0.01	0.06	.....	.03	.00	.25	116
.72	.87	.73	.53	.90	.52	.84	.62	.68	.33	0.01	.55	.29	.13	117
.83	.55	.81	.63	.65	.15	.57	.52	.55	.56	1.94	.14	.25	.09	118a
.01	.00	.01	.01	.01	.....	.01	.00	.00	.....	.....	.....	.....	.01	118b
.06	.09	.06	.12	.00	.....	.00	.01	.02	.....	.....	.....	.02	.02	119a
.52	.73	.53	.15	1.12	.51	1.02	.52	.50	.74	.23	.26	.59	.75	119b
.00	.....	.00	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	123
.05	.05	.05	.03	.17	.05	.15	.....	.02	.02	.10	.02	.01	.00	124a
.07	.12	.08	.30	.18	.02	.15	.01	.08	.18	.03	.08	.12	.02	124b
.07	.10	.07	.14	.11	.01	.09	.33	.01	.....	.33	.....	.....	.....	127
.02	.01	.02	.05	.00	.07	.01	.....	.04	.....	.....	.....	.....	.03	128
.14	.10	.14	.04	.09	.04	.08	.48	.10	.17	.....	.....	.....	.15	129
.05	.01	.05	.09	.04	.....	.03	.32	.30	.....	.27	.07	.....	.....	131a
.03	.02	.03	.04	.04	.....	.03	.18	.03	.....	.....	.....	.....	.01	131b
.03	.00	.03	.01	.....	.....	.....	.08	.....	.....	.....	.01	.....	.....	132a
.01	.....	.01	.....	.....	.02	.00	.....	.....	.....	.01	.....	.....	.....	132b
.06	.12	.06	.08	.11	.04	.10	.22	.05	.21	.15	.....	.04	.01	133a
.02	.05	.02	.00	.03	.11	.05	.....	.00	.....	.....	.....	.01	.....	133b
.01	.03	.01	.01	.01	.....	.01	.....	.00	.....	.....	.01	.03	.....	134a
.06	.03	.06	.07	.09	.01	.08	.04	.....	.....	.02	.01	.01	.01	134b
.01	.00	.01	.01	.03	.02	.03	.....	.02	.....	.....	.....	.....	.....	135
.03	.03	.03	.00	.04	.....	.03	.02	.....	.01	.19	.03	.01	.....	136a
.06	.04	.04	.02	.04	.08	.05	.01	.03	.05	.25	.01	.03	.02	136b
.05	.02	.04	.05	.03	.06	.03	.05	.02	.....	.....	.....	.24	.00	136c
.02	.04	.02	.07	.07	.07	.07	.02	.01	.02	.20	.....	.....	.....	136d
.05	.10	.05	.03	.05	.02	.04	.10	.03	.04	.34	.00	.15	.04	136e
.03	.01	.03	.12	.09	.....	.07	.02	.02	.01	.03	.02	.10	.06	152a
.26	.08	.25	.43	.25	.05	.21	.41	.17	.30	.42	.03	.36	.11	152b
.24	.22	.24	.26	.35	.36	.35	.11	.22	.21	.10	.37	.66	.23	153a
.22	.16	.22	.53	.30	.....	.25	.25	.16	.08	.09	.08	.66	.15	153b
.10	.05	.10	.03	.54	.50	.53	.52	.06	.09	.13	.....	.04	.39	154a
.18	.11	.18	.11	.17	.03	.15	.36	.17	.04	.01	.....	.06	.11	154b
.02	.00	.02	.02	.01	.....	.01	.01	.....	.01	.15	.....	.....	.....	154c
.09	.06	.09	.14	.11	.01	.09	.15	.03	.....	.17	.02	.26	.02	154d
.01	.....	.01	.00	.01	.....	.01	.00	.01	.....	.....	.00	.....	.....	154e
.04	.01	.04	.04	.05	.00	.04	.08	.05	.06	.02	.....	.....	.02	154f
.07	.00	.07	.21	.03	.....	.02	.13	.06	.....	.01	.....	.01	.00	154g
.03	.01	.03	.03	.01	.....	.01	.02	.....	.....	.....	.....	.02	.01	154h
.69	.04	.66	1.04	.10	.03	.09	.21	.03	.22	.80	.17	.04	.05	154i
.31	.31	.31	.40	.39	.15	.35	.29	.22	.09	.58	.01	.16	.09	154j
.12	.17	.14	.39	.01	.....	.00	.04	.17	.....	.....	.06	.....	.....	155a
.05	.14	.06	.01	.01	.06	.02	.07	.04	.04	.....	.00	.49	.01	155b
.05	.06	.05	.13	.21	.....	.17	.14	.00	.....	.38	.....	.16	.....	155c
.03	.06	.03	.02	.02	.....	.01	.17	.....	.00	.....	.....	.....	.....	156a
.06	.24	.07	.08	.13	.....	.11	.22	.01	.....	.02	.00	.02	.02	156b
.05	.04	.05	.08	.02	.....	.02	.04	.01	.....	.....	.....	.01	.....	158a
.02	.02	.02	.01	.11	.....	.09	.02	.01	.....	.....	.....	.....	.03	158b
.33	.28	.33	.32	1.54	.....	1.29	.53	.18	.87	2.51	.05	.....	.03	158c
.02	.01	.02	.03	.03	.....	.04	.00	.00	.....	.....	.....	.23	.....	158d
.32	.31	.32	.34	.45	.12	.40	.56	.13	.07	1.12	.02	.97	.01	158e

TABLE X.—*Noneffective rates for days lost, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	X. MALFORMATION.						
159	Congenital malformations	0.04	0.04	0.02	0.04	0.01	0.04
	XV. ILL-DEFINED DISEASES.						
204–205	Not specified or ill-defined	1.10	1.12	.86	1.13	1.35	1.14
	Total for diseases	42.73	43.83	43.21	44.06	40.60	43.88
	Total for diseases (excluding days for cases admitted prior to 1920).	32.18	32.85	26.36	33.65	28.09	33.36
	XIV. EXTERNAL CAUSES.						
165–174	Suicides (all)	.00	.00	.00	.00	.....	.00
	Accidental traumatisms	5.01	5.16	5.59	5.23	3.20	5.13
175	Poisoning by food	.01	.01	.02	.01	.01	.01
176–177	Other acute poisonings (gas excepted)	.01	.01	.00	.01	.02	.01
178	Conflagrations	.00	.00	.01	.00	.....	.00
179	Burns (conflagrations excepted)	.02	.02	.01	.03	.03	.03
180	Mechanical suffocation	.00	.00	.00	.00	.....	.00
181	Absorption of irrespirable or poisonous gas.	.00	.00	.00	.00	.....	.00
182	Drowning	.00	.00	.....	.00	.....	.00
183	Firearms (wounds of war excepted)	.71	.74	.54	.76	.63	.76
184	Cutting and piercing instruments	.34	.34	.13	.36	.34	.36
185	Fall	1.27	1.30	1.22	1.32	.96	1.30
187	Machines	.06	.06	.00	.06	.03	.06
188a	Railroad accident	.17	.17	.14	.19	.01	.18
188b	Street-car accident	.05	.06	.01	.06	.00	.06
188c	Automobile accident	.49	.51	.68	.52	.19	.50
188d	Balloon and airplane accident	.23	.24	1.49	.15	.....	.14
188ea	Motor-cycle accident	.59	.62	.74	.63	.09	.61
188eb	Other vehicles	.50	.52	.23	.56	.23	.54
188fb	Other crushings	.28	.29	.30	.29	.22	.29
189	Animals (not poisonous)	.26	.26	.08	.27	.45	.28
193	Excessive cold	.02	.02	.00	.02	.00	.02
194	Excessive heat	.02	.02	.00	.02	.01	.02
195–196	Accidental electric shocks	.01	.01	.00	.01	.00	.01
197–199	Homicide (all)	.00	.00	.....	.00	.00	.00
202	Other external violence (cause specified)	.76	.78	.50	.82	.46	.80
202a	Falling objects	.27	.27	.19	.28	.17	.28
202b	Jumping from height	.04	.04	.02	.04	.09	.04
202d	Splinters	.02	.02	.00	.02	.02	.02
202e	Other causes	.44	.44	.29	.47	.18	.46
203	Other external violence (cause not specified)	1.69	1.73	1.37	1.79	1.27	1.76
203a	Athletic exercises	.64	.66	.59	.68	.47	.67
203b	Drilling and marching	.06	.06	.05	.06	.11	.06
203c	Fighting (brawls)	.15	.16	.00	.17	.10	.17
203d	Other causes	.83	.86	.73	.88	.59	.87
	Total for diseases	42.73	43.83	43.21	44.06	40.60	43.88
	Total for external causes	7.51	7.73	7.46	7.90	4.94	7.75
	Grand total	50.25	51.56	50.68	51.96	45.54	51.63
	Excluding days for cases admitted prior to 1920:						
	Total for diseases	32.18	32.85	26.36	33.65	28.09	33.36
	Total for external causes	6.38	6.55	5.88	6.69	4.93	6.60
	Grand total	38.56	39.41	32.25	40.33	33.02	39.96

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.05	0.01	0.05	0.01	0.01	.....	0.00	0.03	0.02	0.02	.....	.....	.....	0.01	159
1.14	1.23	1.14	.76	1.80	1.86	1.81	1.44	.30	.34	3.28	0.99	0.49	.58	204–205
40.80	40.66	40.79	63.55	66.53	40.33	62.24	34.14	23.51	72.36	137.94	30.04	35.95	13.92	
31.57	25.95	31.26	35.08	64.28	37.67	59.91	30.21	22.68	69.57	73.78	23.33	34.16	12.96	
.00	.....	.00	.....	.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	165–174
4.58	3.32	4.51	14.20	2.53	2.67	2.55	4.72	3.02	1.36	9.46	1.06	3.00	1.22	
.01	.....	.01	.00	.07	.04	.07	.01	.02	.....	.....	.....	.....	.....	175
.01	.03	.01	.02	.01	.....	.01	.01	.01	.....	.....	.02	.....	.00	176–177
.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	.22	.....	.....	.....	178
.03	.00	.03	.01	.00	.15	.03	.00	.01	.....	.05	.05	.....	.00	179
.00	.....	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	180
.01	.....	.01	.00	.00	.....	.00	.00	.....	.....	.....	.....	.....	.00	181
.....	.....	.....	.....	.....	.....	.....	.00	.....	.....	.....	.....	.....	.....	182
.55	.74	.56	3.14	.28	.13	.26	.54	.69	.38	2.43	.01	.07	.06	183
.35	.34	.35	.50	.36	.35	.36	.38	.23	.25	.69	.08	.80	.24	184
1.15	.94	1.14	3.14	1.07	1.03	1.06	1.46	1.06	.58	2.41	.82	1.61	.47	185
.07	.03	.06	.09	.02	.....	.01	.04	.04	.....	.21	.....	.06	.00	187
.11	.01	.11	1.06	.01	.00	.01	.....	.00	.....	.92	.....	.....	.00	188a
.05	.....	.05	.20	.02	.01	.02	.00	.....	.....	.72	.05	.....	.00	188b
.55	.21	.53	.75	.06	.10	.06	.36	.24	.04	.56	.....	.08	.04	188c
.16	.....	.15	.19	.04	.....	.03	.22	.01	.....	.....	.....	.....	.....	188d
.47	.10	.45	2.76	.09	.03	.08	.71	.25	.01	.....	.....	.01	.03	188ca
.51	.24	.50	1.63	.10	.19	.12	.20	.18	.....	.17	.....	.12	.18	188cb
.30	.24	.29	.35	.21	.13	.20	.42	.20	.09	.39	.02	.17	.03	188fb
.27	.13	.28	.36	.19	.51	.24	.35	.09	.01	.70	.....	.09	.16	189
.01	.00	.01	.....	.02	.....	.02	.02	.....	.....	2.06	.01	.....	.....	193
.02	.01	.02	.05	.01	.....	.01	.01	.01	.11	.04	.00	.....	.00	194
.01	.00	.01	.03	.00	.....	.00	.01	.....	.....	.....	.....	.....	.00	195–196
.00	.00	.00	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	197–199
.72	.51	.71	2.06	.60	.25	.54	.98	.43	.31	.55	.21	.74	.39	202
.26	.20	.26	.69	.11	.05	.10	.21	.19	.02	.17	.02	.31	.12	202a
.04	.09	.05	.01	.02	.09	.03	.09	.04	.....	.04	.....	.03	.01	202b
.02	.02	.02	.06	.02	.....	.02	.03	.....	.....	.08	.....	.....	.....	202d
.39	.20	.38	1.29	.45	.12	.39	.66	.20	.29	.26	.19	.40	.26	202e
1.62	1.10	1.59	3.89	1.33	2.02	1.44	1.87	1.47	1.46	2.05	.26	1.66	.43	203
.65	.41	.64	1.19	.34	.73	.40	.88	.66	.26	.32	.08	.94	.15	203a
.06	.07	.06	.06	.07	.30	.11	.28	.01	.00	.00	.....	.05	.04	203b
.13	.11	.13	.56	.22	.07	.20	.11	.11	.07	.25	.04	.02	.03	203c
.78	.52	.77	2.07	.70	.92	.74	.60	.69	1.13	1.48	.14	.66	.21	203d
40.80	40.66	40.79	63.55	66.53	40.33	62.24	34.14	23.51	72.36	137.94	30.04	35.95	13.92	
6.96	4.94	6.85	20.24	4.49	4.94	4.56	7.62	4.93	3.24	14.15	1.51	5.41	2.05	
47.76	45.60	47.64	83.79	71.02	45.26	66.80	41.76	28.44	75.60	152.09	31.58	41.36	15.96	
31.57	25.95	31.26	35.08	64.28	37.67	59.91	30.21	22.68	69.57	73.78	23.33	34.16	12.96	
6.37	4.94	6.29	12.05	4.47	4.85	4.53	7.30	4.80	2.96	10.22	1.37	5.41	2.02	
37.93	30.89	37.56	47.13	68.75	42.52	64.44	37.51	27.48	72.53	84.00	24.70	39.56	14.99	

TABLE X.—*Noneffective rates for days lost, United*

Office classification Nos.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American, troops.		
					White.	Colored.	Total.
	XIV. EXTERNAL CAUSES—continued.						
	The following are included above:						
	Diagnoses of injuries—						
1	Abrasions and blisters	0.23	0.23	0.08	0.24	0.14	0.24
2	Anaphylaxis	.00	.00	.....	.00	.....	.00
3	Concussion (brain)	.03	.03	.05	.03	.01	.03
4	Contusion	.45	.46	.24	.48	.43	.47
5	Crushing	.09	.09	.10	.10	.02	.09
6	Dermatitis	.06	.06	.04	.07	.00	.06
7	Dislocation of joint	.14	.14	.21	.14	.10	.14
8	Dislocation of articular cartilage of knee	.04	.04	.08	.04	.....	.03
9	Epiphyseal separation	.01	.01	.02	.01	.01	.01
10	Eye and annexa, traumatisms	.03	.03	.01	.03	.08	.03
11	Foreign body	.04	.04	.00	.04	.05	.04
12	Fracture, simple	2.36	2.43	2.99	2.46	1.01	2.39
13	Fracture, compound	1.16	1.21	1.43	1.22	.60	1.19
14	Fracture, faulty union	.01	.01	.02	.01	.01	.01
15	Hemorrhage, and results	.02	.02	.05	.02	.....	.01
16	Secondary result of injuries	.05	.06	.10	.06	.01	.05
17	Sprain of joint	.64	.65	.42	.68	.57	.67
18	Strain	.08	.09	.08	.09	.07	.09
19	Synovitis, traumatic, cause not specified	.11	.11	.10	.12	.05	.11
20	Wounds, multiple	.10	.10	.21	.09	.02	.09
21	Wounds, penetrating	.14	.14	.06	.15	.11	.15
22	Wounds, perforating	.17	.17	.10	.18	.11	.18
23	Wounds, others	1.09	1.11	.52	1.15	1.32	1.16

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Office classification Nos.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	Porto Ricans.	White.	Philippine Scouts.	
0.22	0.05	0.21	0.51	0.16	0.56	0.23	9.25	0.23	0.18	0.31	0.10	0.56	0.22	1
.00	.....	.00	.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
.02	.01	.02	.11	.01	.....	.00	.09	.01	.....	.....	.....	.01	.....	3
.51	.37	.50	.39	.19	.67	.27	.81	.22	.32	.25	.18	.71	.17	4
.08	.02	.08	.38	.00	.00	.00	.....	.00	.....	.04	.....	.....	.00	5
.07	.00	.06	.02	.08	.....	.07	.11	.07	.08	.02	.08	.....	.02	6
.13	.07	.12	.31	.14	.25	.16	.15	.06	.02	.05	.18	.04	.02	7
.03	.....	.03	.12	.00	.....	.00	.....	.01	.....	.....	.....	.03	.....	8
.01	.01	.01	.01	.00	.....	.00	.04	.....	.....	.....	.....	.....	.....	9
.02	.07	.03	.04	.03	.10	.04	.07	.01	.00	.01	.....	.....	.05	10
.04	.06	.04	.05	.06	.....	.05	.05	.01	.35	.09	.....	.03	.....	11
2.27	.98	2.20	5.75	.84	1.14	.89	2.41	1.95	.05	3.93	.29	1.99	.34	12
.77	.70	.76	6.30	.54	.14	.47	.69	.61	.01	2.25	.01	.....	.20	13
.01	.01	.01	.....	.....	.....	.....	.02	.....	.....	.....	.....	.....	.....	14
.01	.....	.01	.03	.01	.....	.01	.02	.03	.28	.01	.....	.....	.00	15
.05	.01	.05	.07	.06	.....	.05	.08	.02	.39	.14	.....	.03	.00	16
.62	.57	.62	1.23	.69	.55	.67	.86	.42	.53	.95	.15	.48	.28	17
.09	.05	.09	.05	.11	.19	.12	.22	.06	.06	.02	.02	.10	.02	18
.09	.07	.09	.47	.01	.01	.01	.05	.01	.....	.36	.....	.01	.00	19
.07	.03	.07	.38	.09	.01	.07	.08	.01	.08	.00	.....	.....	.00	20
.13	.13	.13	.43	.04	.00	.04	.29	.01	.....	.46	.....	.....	.01	21
.14	.13	.14	.64	.05	.01	.04	.11	.21	.27	1.08	.....	.01	.03	22
1.14	1.40	1.15	1.79	.87	.98	.89	.91	.64	.50	1.30	.38	1.17	.54	23

TABLE XI.—*Discharges for disability, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	4	4	1	3	.....	3
5	Malarial fevers (all)	1	1	.....	1	.....	1
7	Measles	10	10	.....	10	.....	10
10	Diphtheria	3	3	.....	3	.....	3
11	Influenza	60	60	4	56	.....	56
11a	Influenza, with pneumonia	13	13	.....	13	.....	13
11b	Influenza, without pneumonia	47	47	4	43	.....	43
13	Mumps	2	2	.....	2	.....	2
16	Dysentery (all)	2	2	2	.....	.....	.....
24	Meningococcus meningitis	28	28	.....	28	.....	28
25ce	Carrier, epidemic diseases	10	8	.....	8	.....	8
30	Mycoses	11	10	.....	9	1	10
31	Tuberculosis of the respiratory system	2,976	2,896	345	2,335	216	2,551
32–36	Tuberculosis of the other organs	164	163	6	136	21	157
	Tuberculosis (all)	3,140	3,059	351	2,471	237	2,708
38	Syphilis	154	149	24	111	14	125
39	Soft chancre	8	8	.....	5	3	8
40	Gonococcus infection	84	84	2	80	2	82
	Venereal diseases (all)	246	241	26	196	19	215
42	Other infectious diseases	3	2	.....	2	.....	2
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	17	16	2	11	3	14
50	Benign tumors	26	26	1	25	.....	25
51	Acute rheumatic fever	5	5	.....	4	1	5
52b	Osteoarthritis	211	211	21	187	3	190
54	Pellagra	1	1	.....	1	.....	1
56	Rickets	15	14	.....	13	1	14
57	Diabetes mellitus	25	24	6	18	.....	18
58b	Other anemias and chlorosis	2	2	.....	2	.....	2
59	Diseases of the pituitary gland	2	2	.....	2	.....	2
60a	Exophthalmic goiter	75	73	7	66	.....	66
60ba	Goiter, simple	10	9	2	7	.....	7
61–65	Other diseases of ductless glands	9	9	1	8	.....	8
66	Alcoholism (acute or chronic)	17	17	.....	17	.....	17
68a	Drug addiction	39	39	.....	39	.....	39
69	Other general diseases	9	9	1	7	1	8
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	10	10	.....	10	.....	10
71	Simple meningitis	1	1	.....	1	.....	1
73	Other diseases of the spinal cord	18	17	2	15	.....	15
74	Cerebral hemorrhage, apoplexy	1	1	.....	1	.....	1
75a	Hemiplegia	10	10	.....	9	1	10
75ba	Facial paralysis	4	4	.....	4	.....	4
75bb	Other paralyses without specified cause	15	15	3	12	.....	12
76	General paralysis of the insane	40	40	6	34	.....	34
77a	Constitutional psychopathic state	369	368	4	363	1	364
77b	Mental deficiency	371	371	.....	363	8	371
77c	Dementia præcox	639	633	8	599	26	625
77d	Psychasthenia	19	19	8	11	.....	11
77e	Psychoneurosis	128	128	18	108	2	110
77f	Psychosis, alcoholic	25	25	.....	25	.....	25
77g	Psychosis, manic depressive	150	147	14	132	1	133
77h	Other forms of mental alienation	95	93	2	76	15	91
78	Epilepsy	234	234	2	224	8	232

States Army, 1920; absolute numbers.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
1	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1a
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
8	.....	8	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
50	.....	50	4	.....	.....	.....	1	.....	.....	.....	1	.....	.....	11
12	.....	12	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11a
38	.....	38	3	.....	.....	.....	1	.....	.....	.....	1	.....	.....	11b
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
20	.....	20	5	1	.....	1	.....	1	.....	.....	1	.....	.....	24
6	.....	6	.....	1	.....	1	.....	1	.....	.....	.....	.....	2	25ce
1	1	2	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	30
2,167	213	2,380	134	14	3	17	2	6	.....	8	4	7	73	31
111	21	132	20	2	.....	2	1	.....	.....	2	.....	.....	1	32–36
2,278	234	2,512	154	16	3	19	3	6	.....	10	4	7	74	
92	14	106	15	1	.....	1	1	2	.....	.....	.....	5	.....	38
3	3	6	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	39
64	2	66	14	1	.....	1	.....	.....	.....	1	.....	.....	.....	40
159	19	178	30	2	.....	2	1	2	.....	1	1	5	.....	
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	42
9	3	12	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	43–49
15	.....	15	6	1	.....	1	3	.....	.....	.....	.....	.....	.....	50
3	1	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
155	3	158	26	2	.....	2	3	1	.....	.....	.....	.....	.....	52b
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
9	1	10	1	1	.....	1	1	.....	.....	1	.....	.....	1	56
15	.....	15	.....	1	.....	1	.....	1	.....	1	.....	.....	1	57
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58b
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
54	.....	54	2	8	.....	8	1	.....	.....	.....	1	.....	2	60a
5	.....	5	1	1	.....	1	.....	.....	.....	.....	.....	.....	1	60ba
8	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61–65
6	.....	6	6	2	.....	2	.....	1	.....	2	.....	.....	.....	66
33	.....	33	2	3	.....	3	.....	1	.....	.....	.....	.....	.....	68a
6	1	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
7	.....	7	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
13	.....	13	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	73
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
7	1	8	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75a
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75ba
9	.....	9	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75bb
31	.....	31	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	76
303	1	304	16	16	.....	16	11	5	.....	8	3	.....	1	77a
326	8	334	11	18	.....	18	5	1	.....	1	1	.....	.....	77b
521	25	546	41	12	1	13	2	10	1	6	6	1	5	77c
8	.....	8	1	.....	.....	.....	1	1	.....	.....	.....	.....	.....	77d
82	1	83	7	13	1	14	3	2	.....	1	.....	.....	.....	77e
18	.....	18	4	2	.....	2	1	.....	.....	.....	.....	.....	.....	77f
119	1	120	11	.....	.....	.....	1	1	.....	.....	.....	2	1	77g
54	14	68	7	10	1	11	1	4	.....	.....	.....	1	1	77h
184	8	192	19	14	.....	14	8	1	1	1	1	.....	.....	78

TABLE XI.—*Discharges for disability. United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE—con.						
	A. Nervous system—Continued.						
81	Chorea	10	10	.....	10	.....	10
82a	Hysteria and results (psychoses excepted)	108	108	5	102	1	103
82b	Neuralgia	3	3	.....	3	.....	3
82c	Neuritis	49	38	5	33	.....	33
84a	Neurasthenia	103	102	15	86	1	87
84b	Neuro-circulatory asthenia	14	14	1	13	.....	13
84c	Other diseases of the nervous system	80	80	1	77	2	79
	B. Organs of special sense.						
85	The eye and annexa (all)	269	266	11	245	10	255
85a	Refractive error	54	54	1	53	.....	53
85b	Trachoma	32	32	.....	32	.....	32
85c	Conjunctivitis (others)	5	5	.....	5	.....	5
85d	Iritis	7	7	.....	7	.....	7
85e	Keratitis	16	16	4	12	.....	12
85f	Eyelids, diseases of	7	7	1	5	1	6
85g	Eye and annexa, other diseases of	148	145	5	131	9	140
86	The ear and the mastoid process (all)	235	234	14	215	5	220
86aa	Otitis media	204	203	13	186	4	190
86ad	Defective hearing, cause not stated	14	14	1	13	.....	13
86ae	Ear, other diseases of	6	6	.....	6	.....	6
86b	Mastoiditis	11	11	.....	10	1	11
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
87	Pericarditis	4	4	.....	3	1	4
88	Endocarditis and myocarditis (acute)	2	2	.....	2	.....	2
89	Angina pectoris	1	1	.....	1	.....	1
90a	Valvular diseases of the heart (all)	252	250	17	226	7	233
90aa	Aortic insufficiency	25	25	3	21	1	22
90ab	Aortic stenosis	11	9	1	8	.....	8
90ac	Mitral insufficiency	164	164	11	148	5	153
90ad	Mitral stenosis	28	28	1	26	1	27
90ae	Other valvular diseases	24	24	1	23	.....	23
90b	Cardiac hypertrophy and dilatation	8	8	.....	6	2	8
90c	Myocarditis, chronic	50	50	11	37	2	39
90d	Other diseases of the heart (organic)	10	10	.....	10	.....	10
91a	Aneurysm	4	4	.....	3	1	4
91b	Arteriosclerosis	22	22	14	7	1	8
91c	Other diseases of the arteries	1	1	.....	.....	1	1
92	Embolism and thrombosis (not cerebral)	4	4	.....	3	1	4
93a	Hemorrhoids	2	2	.....	2	.....	2
93b	Varicocele	6	6	.....	6	.....	6
93c	Varicose veins	21	21	1	19	1	20
93d	Phlebitis	7	7	1	6	.....	6
94	Diseases of the lymphatic system	15	15	.....	15	.....	15
95	Hemorrhage without specified cause	1	1	1	.....	.....	.....
96a	Cardiac arrhythmia	6	6	.....	6	.....	6
96b	Cardiac disorder, functional	37	37	2	34	1	35
96c	Tachycardia	10	10	1	9	.....	9
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa (all)	36	33	5	27	1	28
97c	Sinusitis	25	24	4	19	1	20
97e	Nasal fossæ, other disease of	11	9	1	8	.....	8
98a	Laryngitis, acute catarrhal	4	4	.....	4	.....	4
99	Bronchitis	83	82	9	71	2	73
100	Pneumonia, broncho	22	22	.....	22	.....	22
101a	Pneumonia, lobar	20	19	.....	16	3	19

States Army, 1920; absolute numbers—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.		
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
9	.....	9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
89	1	90	4	1	.....	1	3	.....	1	3	1	.....	.....	82a
2	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82b
26	.....	26	7	.....	.....	.....	.....	.....	.....	.....	.....	[1] 11	.....	82c
74	1	75	11	.....	.....	.....	.....	1	.....	.....	.....	.....	1	84a
9	.....	9	2	1	.....	1	1	.....	.....	.....	.....	.....	.....	84b
70	2	72	4	.....	.....	.....	1	1	.....	.....	1	.....	.....	84c
202	5	207	9	19	5	24	10	5	.....	.....	.....	2	1	85
38	.....	38	1	7	.....	7	6	1	.....	.....	.....	.....	.....	85a
29	.....	29	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	85b
4	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85c
7	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85d
11	.....	11	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85e
3	.....	3	1	1	1	2	.....	.....	.....	.....	.....	.....	.....	85f
110	5	115	3	11	4	15	4	3	.....	.....	.....	2	1	85g
186	5	191	10	11	.....	11	3	3	1	1	.....	.....	1	86
157	4	161	10	11	.....	11	3	3	1	1	.....	.....	1	86aa
13	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86ad
6	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86ae
10	1	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86b
2	1	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
188	7	195	14	15	.....	15	5	.....	1	2	1	.....	2	90a
19	1	20	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	90aa
7	.....	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	90ab
125	5	130	11	7	.....	7	2	.....	.....	2	1	.....	.....	90ac
22	1	23	1	2	.....	2	.....	.....	1	.....	.....	.....	.....	90ad
15	.....	15	1	4	.....	4	3	.....	.....	.....	.....	.....	.....	90ae
6	2	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90b
24	2	26	7	3	.....	3	2	.....	1	.....	.....	.....	.....	90c
9	.....	9	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	90d
3	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91a
5	1	6	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	91b
.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91c
3	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93a
4	.....	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93b
17	1	18	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	93c
4	.....	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93d
13	.....	13	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
5	.....	5	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	96a
24	1	25	1	6	.....	6	1	1	.....	1	.....	.....	.....	96b
7	.....	7	.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	96c
21	.....	21	5	1	1	2	.....	.....	.....	.....	3	.....	.....	97
15	.....	15	4	.....	1	1	.....	.....	.....	.....	.....	1	.....	97c
6	.....	6	1	1	.....	1	.....	.....	.....	.....	.....	2	.....	97e
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98a
63	2	65	6	.....	.....	.....	.....	2	.....	.....	.....	.....	1	99
17	.....	17	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100
10	3	13	5	.....	.....	.....	1	.....	.....	.....	.....	.....	1	101a

[1] See p. 85.

TABLE XI.—*Discharges for disability, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED.)—continued.						
101b	Pneumonia, not otherwise defined	12	12	1	11	.....	11
102a	Pleurisy, suppurative	149	149	3	140	6	146
102b	Pleurisy, serofibrinous	32	31	4	27	.....	27
102c	Pleurisy, others	87	86	.....	79	7	86
105	Asthma	70	67	5	60	2	62
107	Other diseases of the respiratory system	7	7	3	4	.....	4
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED.)						
108a	Pyorrhea alveolaris	5	5	1	4	.....	4
108b	Other diseases of the mouth and annexa	14	14	3	11	.....	11
109bc	Tonsillitis, acute, follicular	3	3	.....	3	.....	3
109bd	Tonsillitis, chronic	6	6	2	4	.....	4
109be	Other diseases of the pharynx and tonsils	5	5	1	4	.....	4
111a	Ulcer of the stomach	18	18	1	17	.....	17
111b	Ulcer of the duodenum	14	14	3	11	.....	11
112	Other diseases of the stomach (cancer excepted)	41	41	5	36	.....	36
114b	Enteritis and colitis	10	10	1	9	.....	9
116	Other intestinal parasites	2	2	.....	2	.....	2
117	Appendicitis, and typhlitis	14	14	.....	13	1	14
118a	Hernia	44	44	5	35	4	39
118b	Intestinal obstruction	7	7	2	5	.....	5
119a	Fistula in ano	13	13	1	10	2	12
119b	Other diseases of the intestines	16	16	6	9	1	10
123	Biliary calculi	2	2	1	1	.....	1
124a	Cholecystitis	4	4	.....	4	.....	4
124b	Other diseases of the liver	7	7	3	4	.....	4
127	Other diseases of the digestive system	40	39	6	33	.....	33
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	8	8	4	4	.....	4
129	Chronic nephritis	65	61	12	48	1	49
131a	Pyogenic infection of the kidney	16	16	2	14	.....	14
131b	Other diseases of the kidney and annexa	5	5	1	4	.....	4
132a	Nephrolithiasis	10	10	2	8	.....	8
133a	Cystitis	4	4	1	2	1	3
133b	Other diseases of the bladder	5	5	.....	5	.....	5
134a	Stricture of the urethra (nonvenereal)	3	3	.....	3	.....	3
134b	Urethritis (nonvenereal)	1	1	1	.....	.....	.....
135	Diseases of the prostate	1	1	1	.....	.....	.....
136c	Hydrocele	2	2	.....	2	.....	2
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152	Furuncle	5	4	1	3	.....	3
153	Acute abscess	14	14	1	12	1	13
154d	Eczema	7	6	1	5	.....	5
154j	Other diseases of the skin and cellular tissue	49	49	2	39	8	47
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155a	Osteomyelitis	48	48	3	39	6	45
155b	Other diseases of the bone	14	14	3	10	1	11
155c	Fractures, faulty union of	52	52	.....	50	2	52
156a	Ankylosis of joints	31	31	2	26	3	29
156b	Other diseases of the joints	23	22	1	21	.....	21
158a	Hallux valgus	16	16	.....	16	.....	16
158b	Myositis	2	2	.....	2	.....	2
158c	Pes planus	267	266	.....	253	13	266
158d	Tenosynovitis	6	5	.....	5	.....	5
158e	Other diseases of the organs of locomotion	117	116	5	105	6	111

States Army, 1920; absolute numbers—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.		
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0	.....	0	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	101b
107	6	113	32	1	.....	1	.....	.....	.....	.....	.....	.....	.....	102a
24	.....	24	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	102b
67	7	74	11	.....	.....	.....	1	.....	.....	.....	.....	.....	1	102c
55	2	57	.....	1	.....	1	3	1	.....	.....	.....	1	2	105
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	107
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	108a
10	.....	10	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	108b
3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109bc
3	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109bd
3	.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109be
16	.....	16	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111a
10	.....	10	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111b
31	.....	31	2	1	.....	1	2	.....	.....	.....	.....	.....	.....	112
7	.....	7	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	114b
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	116
11	1	12	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	117
30	4	34	3	.....	.....	.....	1	.....	.....	.....	1	.....	.....	118a
3	.....	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118b
8	2	10	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119a
5	1	6	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119b
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	123
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	124a
4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	124b
23	.....	23	3	1	.....	1	5	.....	.....	1	.....	1	.....	127
2	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	128
43	1	44	2	1	.....	1	1	1	.....	.....	.....	.....	4	129
10	.....	10	2	.....	.....	.....	.....	1	.....	1	.....	.....	.....	131a
3	.....	3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	131b
8	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	132a
.....	1	1	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	133a
5	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	133b
3	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134b
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	135
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	136c
1	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	152
8	1	9	3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	153
4	.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	154d
34	8	42	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	154j
24	6	30	14	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	155a
9	1	10	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	155b
40	2	42	3	5	.....	5	2	.....	.....	.....	.....	.....	.....	155c
22	3	25	2	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	156a
17	.....	17	2	2	.....	2	.....	.....	.....	.....	.....	.....	1	156b
15	.....	15	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	158a
1	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	158b
188	13	201	11	39	.....	39	5	3	2	5	.....	.....	1	158c
3	.....	3	1	1	.....	1	.....	.....	.....	.....	.....	1	.....	158d
85	6	91	11	6	.....	6	.....	.....	.....	3	.....	.....	1	158e

TABLE XI.—*Discharges for disability, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	XI. MALFORMATION.						
159	Congenital malformations	6	6	.....	6	.....	6
	XV. ILL-DEFINED DISEASES.						
204–205	Not specified or ill-defined	18	18	.....	16	2	18
	Total for diseases	9,027	8,879	706	7,735	438	8,173
	Total for diseases (excluding discharges for cases admitted prior to 1920)	4,526	4,394	329	3,932	133	4,065
	XIV. EXTERNAL CAUSES.						
	Accidental traumatisms	1,011	1,005	101	884	20	904
176–177	Other acute poisonings (gas excepted)	2	2	.....	2	.....	[illegible]
178	Conflagrations	1	1	1	.....	.....	.....
179	Burns (conflagrations excepted)	2	[illegible]	.....	2	.....	2
181	Absorption of irrespirable or poisonous gas	2	2	.....	2	.....	2
183	Firearms (wounds of war excepted)	183	183	12	163	8	171
184	Cutting and piercing instruments	31	28	2	25	1	26
185	Fall	188	187	12	170	5	175
187	Machines	8	8	.....	7	1	8
188a	Railroad accident	78	78	5	73	.....	73
188b	Street-car accident	12	12	1	11	.....	11
188c	Automobile accident	100	100	10	89	1	90
188d	Balloon and aeroplane accident	71	71	33	38	.....	38
188ea	Motor cycle accident	152	151	14	137	.....	137
188eb	Other vehicles	117	116	6	109	1	110
188fb	Other crushings	35	35	3	29	3	32
189	Animals (not poisonous)	29	29	2	27	.....	27
193	Excessive cold	3	[illegible]	.....	3	.....	3
194	Excessive heat	4	4	.....	4	.....	4
196	Accidental electric shocks	5	5	.....	5	.....	5
202	Other external violence (cause specified)	137	136	9	124	3	127
202a	Falling objects	50	50	5	44	1	45
202b	Jumping from height	5	5	.....	5	.....	5
202d	Splinters	3	3	.....	3	.....	[illegible]
202e	Other causes	79	78	4	72	2	74
203	Other external violence (cause not specified)	208	206	16	186	4	190
203a	Athletic exercises	41	40	3	37	.....	37
203b	Drilling and marching	3	3	1	2	.....	2
203c	Fighting (brawls)	2	2	.....	2	.....	2
203d	Other causes	162	161	12	145	4	149
	Total for diseases	9,027	8,879	706	7,735	438	8,173
	Total for external causes	1,368	1,359	126	1,206	27	1,233
	Grand total	10,395	10,238	832	8,941	465	9,406
	Excluding discharges for cases admitted prior to 1920: Total for diseases	4,526	4,394	329	3,932	133	4,065
	Total for external causes	347	339	18	295	26	321
	Grand total	4,873	4,733	347	4,227	159	4,386

States Army, 1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
6	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	159
14	2	16	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	204–205
6,628	426	7,054	622	246	12	258	93	64	8	50	24	39	109	
3,373	122	3,495	168	224	11	235	76	55	6	10	20	36	96	
438	19	457	415	8	1	9	5	4	.....	11	3	2	4	
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	176–177
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	178
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	179
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181
59	8	67	96	1	.....	1	1	2	.....	4	.....	.....	.....	183
15	1	16	7	2	.....	2	.....	.....	.....	1	.....	2	1	184
95	5	100	67	3	.....	3	1	1	.....	1	2	.....	1	185
6	1	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	187
27	.....	27	44	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	188a
7	.....	7	2	.....	.....	.....	.....	.....	.....	1	1	.....	.....	188b
59	1	60	29	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	188c
28	.....	28	9	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	188d
48	.....	48	85	1	.....	1	2	1	.....	.....	.....	.....	1	188ea
52	.....	52	57	.....	1	1	.....	.....	.....	.....	.....	.....	1	188eb
22	3	25	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	188fb
15	.....	15	10	1	.....	1	.....	.....	.....	1	.....	.....	.....	189
1	.....	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	193
2	.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	194
3	.....	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	196
63	3	66	56	.....	.....	.....	5	.....	.....	.....	.....	.....	1	202
24	1	25	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202a
5	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202b
.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202d
34	2	36	33	.....	.....	.....	5	.....	.....	.....	.....	.....	1	202e
109	3	112	69	2	1	3	2	2	1	1	.....	1	1	203
16	.....	16	20	.....	.....	.....	1	.....	.....	.....	.....	1	.....	203a
1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	203b
1	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	203c
91	3	94	49	1	1	2	.....	2	1	1	.....	.....	1	203d
6,628	426	7,054	622	246	12	258	93	64	8	50	24	39	109	
616	25	641	544	10	2	12	12	6	1	14	3	3	6	
7,244	451	7,695	1,166	256	14	270	105	70	9	64	27	42	115	
3,373	122	3,495	168	224	11	235	76	55	6	10	20	36	96	
253	25	278	19	8	1	9	8	3	.....	3	1	3	5	
3,626	147	3,773	187	232	12	244	84	58	6	13	21	39	101	

TABLE XI.—*Discharges for disability, United*

Office classification numbers.		Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
	Disease.	Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Enlisted men, American troops.		
					White.	Colored.	Total.
	XIV. EXTERNAL CAUSES—continued.						
	The following are included above:						
	Diagnoses of injuries—						
1	Abrasions and blisters	10	9	.....	8	1	9
3	Concussion (brain)	2	2	1	1	.....	1
4	Contusion	35	34	2	31	1	32
5	Crushing	44	44	1	42	1	43
7	Dislocation of joint	18	18	2	16	.....	16
8	Dislocation of articular cartilage of knee	16	16	2	14	.....	14
9	Epiphyseal separation	1	1	.....	1	.....	1
10	Eye and annexa, traumatisms	7	7	.....	6	1	7
11	Foreign body	2	2	.....	2	.....	2
12	Fracture, simple	474	473	51	415	7	422
13	Fracture, compound	385	383	31	344	8	352
14	Fracture, faulty union	1	1	1	.....	.....	.....
15	Hemorrhage, and results	6	6	1	5	.....	5
16	Secondary result of injuries	11	11	1	10	.....	10
17	Sprain of joint	53	53	6	47	.....	47
18	Strain	2	2	.....	2	.....	2
19	Synovitis, traumatic, cause not specified	26	26	3	22	1	23
20	Wounds, multiple	33	33	,	26	.....	26
21	Wounds, penetrating	36	36	1	34	1	35
22	Wounds, perforating	20	20	2	17	1	18
23	Wounds, others	86	83	3	78	2	80

States Army, 1920; absolute numbers—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Office classification numbers.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China.	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	910,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
4	.....	4	3	.....	1	1	.....	1	.....	.....	.....	.....	1	1
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
22	1	23	6	.....	.....	.....	1	.....	.....	1	1	.....	1	4
23	1	24	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
9	.....	9	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
9	.....	9	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
1	1	2	4	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	10
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
225	6	231	181	2	1	3	2	2	.....	2	1	1	.....	12
135	8	143	199	3	.....	3	2	1	.....	4	.....	.....	2	13
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
3	.....	3	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	15
8	.....	8	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	16
29	.....	29	16	.....	.....	.....	1	.....	.....	.....	1	.....	.....	17
2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
14	1	15	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
12	.....	12	13	1	.....	1	.....	.....	.....	.....	.....	.....	.....	20
19	1	20	11	.....	.....	.....	3	.....	.....	1	.....	.....	.....	21
3	1	4	11	.....	.....	.....	1	1	.....	1	.....	.....	.....	22
45	2	47	27	4	.....	4	1	.....	.....	1	.....	2	1	23

TABLE XII.—*Discharges for disability, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.						
1a	Typhoid fever	0.02	0.02	0.07	0.02	.....	0.02
	Malarial fevers (all)	.00	.00	.....	.01	.....	.01
7	Measles	.05	.05	.....	.06	.....	.05
10	Diphtheria	.01	.01	.....	.02	.....	.02
11	Influenza	.29	.30	.28	.32	.....	.30
11a	Influenza, with pneumonia	.06	.06	.....	.07	.....	.07
11b	Influenza, without pneumonia	.22	.23	.28	.24	.....	.23
13	Mumps	.01	.01	.....	.01	.....	.01
16	Dysentery (all)	.01	.01	.14	.....	.....	.....
24	Meningococcus meningitis	.13	.14	.....	.16	.....	.15
25ce	Carrier, epidemic diseases	.05	.04	.....	.05	.....	.04
30	Mycoses	.05	.05	.....	.05	0.11	.05
31	Tuberculosis of the respiratory system	14.21	14.43	24.07	13.21	22.74	13.69
32–36	Tuberculosis of the other organs	.78	.81	.42	.77	2.21	.84
	Tuberculosis (all)	14.99	15.25	24.49	13.98	24.96	14.54
38	Syphilis	.74	.74	1.67	.63	1.47	.67
39	Soft chancre	.04	.04	.....	.03	.32	.04
40	Gonococcus infection	.40	.42	.14	.45	.21	.44
	Venereal diseases (all)	1.17	1.20	1.81	1.11	2.00	1.15
42	Other infectious diseases	.01	.01	.....	.01	.....	.01
	II. GENERAL DISEASES NOT INCLUDED ABOVE.						
43–49	Cancer and other malignant tumors	.08	.08	.14	.06	.32	.08
50	Benign tumors	.12	.13	.07	.14	.....	.13
51	Acute rheumatic fever	.02	.02	.....	.02	.11	.03
52b	Osteoarthritis	1.01	1.05	1.47	1.06	.32	1.02
54	Pellagra	.00	.00	.....	.01	.....	.01
56	Rickets	.07	.07	.....	.07	.11	.08
57	Diabetes mellitus	.12	.12	.42	.10	.....	.10
58b	Other anemias and chlorosis	.01	.01	.....	.01	.....	.01
59	Diseases of the pituitary gland	.01	.01	.....	.01	.....	.01
60a	Exophthalmic goiter	.36	.36	.49	.37	.....	.35
60ba	Goiter, simple	.05	.04	.14	.04	.....	.04
61–65	Other diseases of ductless glands	.04	.04	.07	.05	.....	.04
66	Alcoholism (acute or chronic)	.08	.08	.....	.10	.....	.09
68a	Drug addiction	.19	.19	.....	.22	.....	.21
69	Other general diseases	.04	.04	.07	.04	.11	.04
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.						
	A. Nervous system.						
70	Encephalitis	.05	.05	.....	.06	.....	.05
71	Simple menigitis	.00	.00	.....	.01	.....	.01
73	Other diseases of the spinal cord	.09	.08	.14	.08	.....	.08
74	Cerebral hemorrhage, apoplexy	.00	.00	.....	.01	.....	.01
75a	Hemiplegia	.05	.05	.....	.05	.11	.05
75ba	Facial paralysis	.02	.02	.....	.02	.....	.02
75bb	Other paralyses without specified cause	.07	.07	.21	.07	.....	.06
76	General paralysis of the insane	.19	.20	.42	.19	.....	.18
77a	Constitutional psychopathic state	1.76	1.83	.28	2.05	.11	1.95
77b	Mental deficiency	1.77	1.85	.....	2.05	.84	1.99
77c	Dementia præcox	3.05	3.15	.56	3.39	2.74	3.35
77d	Psychasthenia	.09	.09	.56	.06	.....	.06
77e	Psychoneurosis	.61	.64	1.26	.61	.21	.59
77f	Psychosis, alcoholic	.12	.12	.....	.14	.....	.13
77g	Psychosis, manic depressive	.72	.73	.98	.77	.11	.71
77h	Other forms of mental alienation	.45	.46	.14	.43	1.58	.49
78	Epilepsy	1.12	1.17	.14	1.27	.84	1.25

States Army, 1920; ratios per 1,000.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.01	.....	0.01	0.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1a
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.06	.....	.05	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.02	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.36	.....	.34	.26	.....	.....	.....	0.20	.....	.....	.....	0.51	.....	.....	11
.09	.....	.08	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11a
.27	.....	.26	.20	.....	.....	.....	.20	.....	.....	.....	.51	.....	.....	11b
.01	.....	.01	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
.14	.....	.14	.33	0.11	.....	0.09	.....	0.23	.....	.....	0.51	.....	.....	24
.04	.....	.04	.....	.11	.....	.09	.....	.23	.....	.....	.....	.....	.....	25ce
.01	0.13	.01	.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.14	30
15.57	27.44	16.20	8.80	1.58	1.73	1.61	0.40	1.36	.....	8.19	2.03	4.57	10.01	31
.80	2.70	.90	1.31	.23	.....	.19	.20	.....	.....	2.05	.....	.....	.14	32–36
16.37	30.14	17.10	10.12	1.81	1.73	1.80	.60	1.36	.....	10.24	2.03	4.57	10.14	
.66	1.80	.72	.99	.11	.....	.09	.20	.45	.....	.....	.....	3.26	.....	38
.02	.39	.04	.07	.....	.....	.....	.....	.....	.....	.....	.51	.....	.....	39
.46	.26	.45	.92	.11	.....	.09	.....	.....	.....	1.02	.....	.....	.....	40
1.14	2.45	1.21	1.97	.23	.....	.19	.20	.45	.....	1.02	.51	3.26	.....	
.01	.....	.01	.07	.....	.....	.....	.....	.....	.....	.....	.....	.65	.....	42
.06	.39	.08	.....	.....	.....	.....	.....	.45	.....	.....	.....	.....	.14	43–49
.11	.....	.10	.39	.11	.....	.09	.60	.....	.....	.....	.....	.....	.....	50
.02	.13	.03	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
1.11	.39	1.08	1.71	.23	.....	.19	.60	.23	.....	.....	.....	.....	.....	52b
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.06	.13	.07	.07	.11	.....	.09	.20	.....	.....	1.02	.....	.....	.14	55
.11	.....	.10	.....	.11	.....	.09	.....	.23	.....	1.02	.....	.....	.14	57
.01	.....	.01	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58b
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
.39	.....	.37	.13	.90	.....	.76	.20	.....	.....	.....	.51	.....	.27	60a
.04	.....	.03	.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.14	60ba
.06	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61–65
.04	.....	.04	.39	.23	.....	.19	.....	.23	.....	2.05	.....	.....	.....	[illegible]
.24	.....	.22	.13	.34	.....	.28	.....	.23	.....	.....	.....	.....	.....	68a
.04	.13	.05	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69
.05	.....	.05	.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71
.09	.....	.09	.13	.....	.....	.....	.....	.....	.....	.....	.....	.65	.....	73
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
.05	.13	.05	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75a
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75ba
.06	.....	.06	.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75bb
.22	.....	.21	.07	.....	.....	.....	.....	.45	.....	.....	.....	.....	.....	76
2.18	.13	2.07	1.05	1.81	.....	1.51	2.21	1.36	.....	8.19	1.52	.....	.14	77a
2.34	1.03	2.27	.72	2.04	.....	1.70	1.00	.23	.....	1.02	.51	.....	.....	77b
3.74	3.22	3.72	2.69	1.36	.58	1.23	.40	2.26	0.81	6.14	3.04	.65	.69	77c
.06	.....	.05	.07	.....	.....	.....	.20	.23	.....	.....	.....	.....	.....	77d
.59	.13	.56	.46	1.47	.58	1.32	.60	.45	.....	1.02	.....	.....	.....	77e
.13	.....	.12	.26	.23	.....	.19	.20	.....	.....	.....	.....	.....	.....	77f
.85	.13	.81	.72	.....	.....	.....	.20	.23	.....	.....	.....	1.30	.14	77g
.39	1.80	.46	.46	1.13	.58	1.04	.20	.90	.....	.....	.....	.65	.14	77h
1.32	1.03	1.31	1.25	1.58	.....	1.32	.60	.23	.81	1.02	.51	.....	.....	78

TABLE XII.—*Discharges for disability, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE—contd.						
	A. Nervous system—Continued.						
81	Chorea	0.05	0.05	.....	0.06	.....	0.05
82a	Hysteria and results (psychoses excepted)	.52	.54	0.35	.58	0.11	.55
82b	Neuralgia	.01	.01	.....	.02	.....	.02
82c	Neuritis	.23	.19	.35	.19	.....	.18
84a	Neurasthenia	.49	.51	1.05	.49	.11	.47
84b	Neuro-circulatory asthenia	.07	.07	.07	.07	.....	.07
84c	Other diseases of the nervous system	.38	.40	.07	.44	.21	.42
	B. Organs of special sense.						
85	The eye and annexa, (all)	1.28	1.33	.77	1.39	1.05	1.37
85a	Refractive error	.26	.27	.07	.30	.....	.28
85b	Trachoma	.15	.16	.....	.18	.....	.17
85c	Conjunctivitis (others)	.02	.02	.....	.03	.....	.03
85d	Iritis	.03	.03	.....	.04	.....	.04
85e	Keratitis	.08	.08	.28	.07	.....	.06
85f	Eyelids, diseases of	.03	.03	.07	.03	.11	.03
85g	Eye and annexa, other diseases of	.71	.72	.35	.74	.95	.75
86	The ear and the mastoid process	1.12	1.17	.98	1.22	.53	1.18
86aa	Otitis media	.97	1.01	.91	1.05	.42	1.02
86ad	Defective hearing, cause not stated	.07	.07	.07	.07	.....	.07
86ae	Ear, other diseases of	.03	.03	.....	.03	.....	.03
86b	Mastoiditis	.05	.05	.....	.06	.11	.06
	IV. DISEASES OF THE CIRCULATORY SYSTEM.						
87	Pericarditis	.02	.02	.....	.02	.11	.02
88	Endocarditis and myocarditis (acute)	.01	.01	.....	.01	.....	.01
89	Angina pectoris	.00	.00	.....	.01	.....	.01
90a	Valvular diseases of the heart, (all)	1.20	1.25	1.19	1.28	.74	1.25
90aa	Aortic insufficiency	.12	.12	.21	.12	.11	.12
90ab	Aortic stenosis	.05	.04	.07	.05	.....	.04
90ac	Mitral insufficiency	.78	.82	.77	.84	.53	.82
90ad	Mitral stenosis	.13	.14	.07	.15	.11	.14
90ae	Other valvular diseases	.11	.12	.07	.13	.....	.12
90b	Cardiac hypertrophy and dilatation	.04	.04	.....	.03	.21	.04
90c	Myocarditis, chronic	.24	.25	.77	.21	.21	.21
90d	Other diseases of the heart (organic)	.05	.05	.....	.06	.....	.05
91a	Aneurysm	.02	.02	.....	.02	.11	.02
91b	Arteriosclerosis	.11	.11	.98	.04	.11	.04
91c	Other diseases of the arteries	.00	.00	.....	.....	.11	.01
92	Embolism and thrombosis (not cerebral)	.02	.02	.....	.02	.11	.02
93a	Hemorrhoids	.01	.01	.....	.01	.....	.01
93b	Varicocele	.03	.03	.....	.03	.....	.03
93c	Varicose veins	.10	.10	.07	.11	.11	.11
93d	Phlebitis	.03	.03	.07	.03	.....	.03
94	Diseases of the lymphatic system	.07	.07	.....	.08	.....	.08
95	Hemorrhage without specified cause	.00	.00	.07	.....	.....	.....
96a	Cardiac arrhythmia	.03	.03	.....	.03	.....	.03
96b	Cardiac disorder, functional	.18	.18	.14	.19	.11	.19
96c	Tachycardia	.05	.05	.07	.05	.....	.05
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).						
97	Diseases of the nasal fossæ and their annexa, (all)	.17	.16	.35	.15	.11	.15
97c	Sinusitis	.12	.12	.28	.11	.11	.11
97e	Nasal fossæ, other diseases of	.05	.04	.07	.05	.....	.04
98a	Laryngitis, acute catarrhal	.02	.02	.....	.02	.....	.02
99	Bronchitis	.40	.41	.63	.40	.21	.39
100	Pneumonia, broncho	.11	.11	.....	.12	.....	.12
101a	Pneumonia, lobar	.10	.09	.....	.09	.32	.10
101b	Pneumonia, not otherwise defined	.06	.06	.07	.06	.....	.06

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China.	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.06	.....	0.06	0.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
.64	0.13	.61	.26	0.11	.....	0.09	0.60	.....	0.81	3.07	0.51	.....	.....	82a
.01	.....	.01	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82b
.19	.....	.18	.46	.....	.....	.....	.....	.....	.....	.....	.....	[1]7.18	.....	82c
.53	.13	.51	.72	.....	.....	.....	.....	0.23	.....	.....	.....	.....	0.14	84a
.06	.....	.06	.13	.11	.....	.09	.20	.....	.....	.....	.....	.....	.....	84b
.50	.26	.49	.26	.....	.....	.....	.20	.23	.....	.....	.51	.....	.....	84c
1.45	.64	1.41	.59	2.15	2.89	2.27	2.00	1.13	.....	.....	.....	1.30	.14	85
.27	.....	.26	.07	.79	.....	.66	1.20	.23	.....	.....	.....	.....	.....	85a
.21	.....	.20	.13	.....	.....	.....	.....	.23	.....	.....	.....	.....	.....	85b
.03	.....	.03	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85c
.05	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85d
.08	.....	.07	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85e
.02	.....	.02	.07	.11	.58	.19	.....	.....	.....	.....	.....	.....	.....	85f
.79	.64	.78	.20	1.24	2.31	1.42	.80	.68	.....	.....	.....	1.30	.14	85g
1.34	.64	1.30	.66	1.24	.....	1.04	.60	.68	.81	1.02	.....	.....	.14	86
1.13	.52	1.10	.66	1.24	.....	1.04	.60	.68	.81	1.02	.....	.....	.14	86aa
.09	.....	.09	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86ad
.04	.....	.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86ae
.07	.13	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86b
.01	.13	.02	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
.01	.....	.01	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
1.35	.90	1.33	.92	1.70	.....	1.42	1.00	.....	.81	2.05	.51	.....	.27	90a
.14	.13	.14	.....	.23	.....	.19	.....	.....	.....	.....	.....	.....	.....	90aa
.05	.....	.05	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.27	90ab
.90	.64	.89	.72	.79	.....	.66	.40	.....	.....	2.05	.51	.....	.....	90ac
.16	.13	.16	.07	.23	.....	.19	.....	.....	.81	.....	.....	.....	.....	90ad
.11	.....	.10	.07	.45	.....	.38	.60	.....	.....	.....	.....	.....	.....	90ae
.04	.26	.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90b
.17	.26	.18	.46	.34	.....	.28	.40	.....	.81	.....	.....	.....	.....	90c
.06	.....	.06	.....	.....	.....	.....	.....	.....	.....	1.02	.....	.....	.....	90d
.02	.13	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91a
.04	.13	.04	.....	.23	.....	.19	.....	.....	.....	.....	.....	.....	.....	91b
.....	.13	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91c
.02	.13	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	92
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93a
.03	.....	.03	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93b
.12	.13	.12	.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	93c
.03	.....	.03	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93d
.09	.....	.09	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
.04	.....	.03	.....	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	96a
.17	.13	.17	.07	.68	.....	.57	.20	.23	.....	1.02	.....	.....	.....	96b
.05	.....	.05	.....	.23	.....	.19	.....	.....	.....	.....	.....	.....	.....	96c
.15	.....	.14	.33	.11	.58	.19	.....	.....	.....	.....	.....	1.96	.....	97
.11	.....	.10	.26	.....	.58	.09	.....	.....	.....	.....	.....	.65	.....	97c
.01	.....	.01	.07	.11	.....	.09	.....	.....	.....	.....	.....	1.30	.....	97e
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98a
.45	.26	.44	.39	.....	.....	.....	.....	.45	.....	.....	.....	.....	.14	99
.12	.....	.12	.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100
.07	.39	.09	.33	.....	.....	.....	.20	.....	.....	.....	.....	.....	.14	101a
.06	.....	.06	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	101b

[1] See page 85.

TABLE XII.—*Discharges for disability, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED)—continued.						
102a	Pleurisy, suppurative	0.71	0.74	0.21	0.79	0.63	0.78
102b	Pleurisy, serofibrinous	.15	.15	.28	.15	.....	.14
102c	Pleurisy, others	.42	.43	.....	.45	.74	.46
105	Asthma	.33	.33	.35	.34	.21	.33
107	Other diseases of the respiratory system	.03	.03	.21	.02	.....	.02
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).						
108a	Pyorrhea alveolaris	.02	.02	.07	.02	.....	.02
108b	Other diseases of the mouth and annexa	.07	.07	.21	.06	.....	.06
109bc	Tonsilitis, acute, follicular	.01	.01	.07	.02	.....	.02
109bd	Tonsilitis, chronic	.03	.03	.....	.02	.....	.02
109be	Other diseases of the pharynx and tonsils	.02	.02	.07	.02	.....	.02
111a	Ulcer of the stomach	.09	.09	.35	.10	.....	.09
111b	Ulcer of the duodenum	.07	.07	.....	.06	.....	.06
112	Other diseases of the stomach (cancer excepted).	.20	.20	.07	.20	.....	.19
114b	Enteritis and colitis	.05	.05	.....	.05	.....	.05
116	Other intestinal parasites	.01	.01	.....	.01	.....	.01
117	Appendicitis, and typhlitis	.07	.07	.....	.07	.11	.08
118a	Hernia	.21	.22	.35	.20	.42	.21
118b	Intestinal obstruction	.03	.03	.14	.03	.....	.03
119a	Fistula in ano	.06	.06	.07	.06	.21	.06
119b	Other diseases of the intestines	.08	.08	.42	.05	.11	.05
123	Biliary calculi	.01	.01	.07	.01	.....	.01
124a	Cholecystitis	.02	.02	.....	.02	.....	.02
124b	Other diseases of the liver	.03	.03	.21	.02	.....	.02
127	Other diseases of the digestive system	.19	.19	.42	.19	.....	.18
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).						
128	Acute nephritis	.04	.04	.28	.02	.....	.20
129	Chronic nephritis	.31	.30	.84	.27	.11	.26
131a	Pyogenic infection of the kidney	.08	.08	.14	.08	.....	.08
131b	Other diseases of the kidney and annexa	.02	.02	.07	.02	.....	.02
132a	Nephrolithiasis	.05	.05	.14	.05	.....	.04
133a	Cystitis	.02	.02	.07	.01	.11	.02
133b	Other diseases of the bladder	.02	.02	.....	.03	.....	.03
134a	Stricture of the urethra (nonvenereal)	.01	.01	.....	.02	.....	.02
134b	Urethritis (nonveneral)	.00	.00	.07	.....	.....	.....
135	Diseases of the prostate	.00	.00	.07	.....	.....	.....
136c	Hydrocele	.01	.01	.....	.01	.....	.01
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.						
152	Furuncle	.02	.02	.07	.02	.....	.02
153	Acute abscess	.07	.07	.07	.07	.11	.07
154d	Eczema	.03	.03	.07	.03	.....	.03
154j	Other diseases of the skin and cellular tissue	.23	.24	.14	.22	.84	.25
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).						
155a	Osteomyelitis	.23	.24	.21	.22	.63	.24
155b	Other diseases of the bone	.07	.07	.21	.06	.11	.06
155c	Fracture, faulty union of	.25	.26	.....	.28	.21	.28
156a	Ankylosis of joints	.15	.15	.14	.15	.32	.16
156b	Other diseases of the joints	.11	.11	.07	.12	.....	.11
158a	Hallux valgus	.08	.08	.....	.09	.....	.09
158b	Myositis	.01	.01	.....	.01	.....	.01
158c	Pes planus	1.27	1.33	.....	1.43	1.37	1.43
158d	Tenosynovitis	.03	.02	.....	.03	.....	.03
158e	Other diseases of the organs of locomotion	.56	.58	.35	.59	.63	.59

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).											Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	1,126	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.77	0.77	0.77	2.10	0.11	.....	0.09	.....	.....	.....	.....	.....	.....	.....	102a
.17	.....	.16	.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.14	102b
.48	.90	.50	.72	.....	.....	.....	0.20	.....	.....	.....	.....	.....	.14	102c
.40	.26	.39	.....	.11	.....	.09	.60	0.23	.....	.....	.....	0.65	.27	105
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	107
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	108a
.07	.....	.07	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	108b
.02	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109bc
.02	.....	.02	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109bd
.02	.....	.02	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109be
.11	.....	.11	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111a
.07	.....	.07	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	111b
.22	.....	.21	.13	.11	.....	.09	.40	.....	.....	.....	.....	.....	.....	112
.05	.....	.05	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	114b
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	116
.08	.13	.08	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	117
.22	.52	.23	.20	.....	.....	.....	.20	.....	.....	.....	0.51	.....	.....	118a
.02	.....	.02	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118b
.06	.26	.07	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119a
.04	.13	.04	.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119b
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	123
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	124a
.03	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	124b
.17	.....	.16	.20	.11	.....	.09	1.00	.....	.....	1.02	.....	.65	.....	127
.01	.....	.01	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	128
.31	.13	.30	.13	.11	.....	.09	.20	.23	.....	.....	.....	.....	.55	129
.07	.....	.07	.13	.....	.....	.....	.....	.23	.....	1.02	.....	.....	.....	131a
.02	.....	.02	.....	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	131b
.06	.....	.05	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	132a
.....	.13	.01	.07	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	133a
.04	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	133b
.02	.....	.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134a
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134b
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	135
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	136c
.01	.....	.01	.13	.....	.....	.....	.....	.....	.....	.....	.....	.65	.....	152
.06	.13	.06	.20	.....	.....	.....	.....	.....	.....	.....	.51	.....	.....	153
.03	.....	.03	.07	.....	.....	.....	.....	.....	.....	.....	.....	.65	.....	154d
.24	1.03	.29	.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	154j
.17	.77	.20	.92	.....	.....	.....	.....	.23	.....	.....	.....	.....	.....	155a
.06	.13	.07	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	155b
.29	.26	.29	.20	.57	.....	.47	.40	.....	.....	.....	.....	.....	.....	155c
.16	.39	.17	.13	.....	.....	.....	.40	.....	.....	.....	.....	.....	.....	156a
.12	.....	.12	.13	.23	.....	.19	.....	.....	.....	.....	.....	.....	.14	156b
.11	.....	.10	.....	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	158a
.01	.....	.01	.....	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	158b
1.42	1.67	1.37	.72	4.41	.....	3.69	1.00	.68	1.62	5.12	.....	.....	.14	158c
.02	.....	.02	.07	.11	.....	.09	.....	.....	.....	.....	.....	.65	.....	158d
.61	.77	.62	.72	.68	.....	.57	.....	.....	.....	3.07	.....	.....	.14	158e

TABLE XII.—*Discharges for disability, United*

Nos. of international classification.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored.	Total.
	XI. MALFORMATION.						
159	Congenital malformations	0.03	0.03	.....	0.03	.....	0.03
	XV. ILL-DEFINED DISEASES.						
204-205	Not specified or ill-defined	.09	.09	.....	.09	0.21	.10
	Total for diseases	43.10	44.25	49.27	43.75	46.12	43.87
	Total for diseases (excluding discharges for cases admitted prior to 1920)	21.61	21.90	22.96	22.24	14.00	21.82
	XIV. EXTERNAL CAUSES.						
	Accidental traumatisms	4.83	5.01	7.05	5.00	2.11	4.85
176-177	Other acute poisonings (gas excepted)	.01	.01	.....	.01	.....	.01
178	Conflagrations	.00	.00	.07	.....	.....	.....
179	Burns (conflagrations excepted)	.01	.01	.....	.01	.....	.01
181	Absorption of irrespirable or poisonous gas	.01	.01	.....	.01	.....	.01
183	Firearms (wounds of war excepted)	.87	.91	.84	.92	.84	.92
184	Cutting and piercing instruments	.15	.14	.14	.14	.11	.14
185	Fall	.90	.93	.84	.96	.53	.94
187	Machines	.04	.04	.....	.04	.11	.04
188a	Railroad accident	.37	.39	.35	.41	.....	.39
188b	Street-car accident	.06	.06	.07	.06	.....	.06
188c	Automobile accident	.48	.50	.70	.50	.11	.48
188d	Balloon and airplane accident	.34	.35	2.30	.21	.....	.20
188ea	Motor-cycle accident	.73	.75	.98	.77	.....	.74
188eb	Other vehicles	.56	.58	.42	.62	.11	.59
188fb	Other crushings	.17	.17	.21	.16	.32	.17
189	Animals (not poisonous)	.14	.14	.14	.15	.....	.14
193	Excessive cold	.01	.01	.....	.02	.....	.02
194	Excessive heat	.02	.02	.....	.02	.....	.02
196	Accidental electric shocks	.02	.02	.....	.03	.....	.03
202	Other external violence (cause specified)	.65	.68	.63	.70	.32	.68
202a	Falling objects	.24	.25	.35	.25	.11	.24
202b	Jumping from height	.02	.02	.....	.03	.....	.03
202d	Splinters	.01	.01	.....	.02	.....	.02
202e	Orher causes	.38	.39	.28	.41	.21	.40
203	Other external violence (cause not specified)	.99	1.03	1.12	1.05	.42	1.02
203a	Athletic exercises	.20	.20	.21	.21	.....	.20
203b	Drilling and marching	.01	.01	.07	.01	.....	.01
203c	Fighting (brawls)	.01	.01	.....	.01	.....	.01
203d	Other causes	.77	.80	.84	.82	.42	.80
	Total for diseases	43.10	44.25	49.27	43.75	46.12	43.87
	Total for external causes	6.53	6.77	8.79	6.82	2.84	6.62
	Grand total	49.63	51.02	58.06	50.57	48.96	50.49
	Excluding discharges for cases admitted prior to 1920	21.61	21.90	22.96	22.24	14.00	21.82
	Total for external causes	1.66	1.69	1.26	1.67	2.74	1.72
	Grand total	23.26	23.59	24.21	23.91	16.74	23.54

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Nos. of international classification.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.04	.....	0.04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	159
.10	0.26	.11	0.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	204–205
47.63	54.87	48.01	40.87	27.82	6.92	24.40	18.66	14.46	6.49	51.18	12.15	25.44	14.94	
24.24	15.71	23.79	11.04	25.34	6.35	22.23	15.24	12.43	4.87	10.24	10.13	23.48	13.16	
3.15	2.45	3.11	27.27	.90	.58	.85	1.00	.90	.....	11.26	1.52	1.30	.55	
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	176–177
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	178
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	179
.01	.....	.01	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181
.42	1.03	.46	6.31	.11	.....	.09	.20	.45	.....	4.09	.....	.....	.....	183
.11	.13	.11	.46	.23	.....	.19	.....	.....	.....	1.02	.....	1.30	.14	184
.68	.64	.68	4.40	.34	.....	.28	.20	.23	.....	1.02	1.01	.....	.14	185
.04	.13	.05	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	187
.19	.....	.18	2.89	.....	.....	.....	.....	.....	.....	2.05	.....	.....	.....	188a
.05	.....	.05	.13	.....	.....	.....	.....	.....	.....	1.02	.51	.....	.....	188b
.42	.13	.41	1.91	.....	.....	.....	.....	.....	.....	1.02	.....	.....	.....	188c
.20	.....	.19	.59	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	188d
.34	.....	.33	5.58	.11	.....	.09	.40	.23	.....	.....	.....	.....	.14	188ea
.37	.....	.35	3.75	.....	.58	.09	.....	.....	.....	.....	.....	.....	.14	188eb
.16	.39	.17	.46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	188fb
.11	.....	.10	.66	.11	.....	.09	.....	.....	.....	1.02	.....	.....	.....	189
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	2.05	.....	.....	.....	193
.01	.....	.01	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	194
.02	.....	.02	.13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	196
.45	.39	.45	3.68	.....	.....	.....	1.00	.....	.....	.....	.....	.....	.14	202
.17	.13	.17	1.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202a
.04	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202b
.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202d
.24	.26	.25	2.17	.....	.....	.....	1.00	.....	.....	.....	.....	.....	.14	202e
.78	.39	.76	4.53	.23	.58	.28	.40	.45	.81	1.02	.....	.65	.14	203
.11	.....	.11	1.31	.....	.....	.....	.20	.....	.....	.....	.....	.65	.....	203a
.01	.....	.01	.....	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	203b
.01	.....	.01	.....	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	203c
.65	.39	.64	3.22	.11	.58	.19	.....	.45	.81	1.02	.....	.....	.14	203d
47.63	54.87	48.01	40.87	27.82	6.92	24.40	18.66	14.46	6.49	51.18	12.15	25.44	14.94	
4.43	3.22	4.36	35.74	1.13	1.15	1.13	2.41	1.36	.81	14.33	1.52	1.96	.82	
52.06	58.08	52.38	76.61	28.96	8.08	25.54	21.06	15.82	7.30	65.50	13.67	27.40	15.76	
24.24	15.71	23.79	11.04	25.34	6.35	22.23	15.24	12.43	4.87	10.24	10.13	23.48	13.16	
1.82	3.22	1.89	1.25	.90	.58	.85	1.60	.68	.....	3.07	.51	1.96	.69	
26.05	18.93	25.68	12.29	26.24	6.92	23.08	16.85	13.10	4.87	13.31	10.63	25.44	13.85	

TABLE XII.—*Discharges for disability, United*

Office classification number.	Disease.	Total United States Army.					
	Mean strength	209,464	200,636	14,330	176,809	9,497	186,306
		Total officers and enlisted men.	Officers and American enlisted men.	Total officers.	Total enlisted men, American troops.		
					White.	Colored	Total.
	XIV. EXTERNAL CAUSES—continued.						
	The following are included above:						
	Diagnoses of injuries—						
1	Abrasions and blisters	0.05	0.04	.....	0.05	0.11	0.05
2	Concussion (brain)	.01	.01	0.07	.01	.....	.01
3	Contusion	.17	.17	.14	.18	.11	.17
4	Crushing	.21	.22	.07	.24	.11	.23
5	Dislocation of joint	.09	.09	.14	.09	.....	.09
6	Dislocation of articular cartilage of knee	.08	.08	.14	.08	.....	.08
7	Epiphyseal separation	.00	.00	.....	.01	.....	.01
8	Eye and annexa, traumatisms	.03	.03	.....	.03	.11	.04
9	Foreign body	.01	.01	.....	.01	.....	.01
10	Fracture, simple	2.26	2.26	3.56	2.35	.74	2.26
11	Fracture, compound	1.84	1.83	2.16	1.95	.84	1.89
12	Fracture, faulty union	.00	.00	.07	.....	.....	.....
13	Hemorrhage and results	.03	.03	.07	.03	.....	.03
14	Secondary result of injuries	.05	.05	.07	.06	.....	.05
15	Sprain of joint	.25	.26	.42	.27	.....	.25
16	Strain	.01	.01	.....	.01	.....	.01
17	Synovitis, traumatic, cause not specified	.12	.13	.21	.12	.11	.12
18	Wounds, multiple	.16	.16	.49	.15	.....	.14
19	Wounds, penetrating	.17	.18	.07	.19	.11	.19
20	Wounds, perforating	.10	.10	.14	.10	.11	.10
21	Wounds, others	.41	.41	.21	.44	.21	.43

States Army, 1920; ratios per 1,000—Continued.

American troops (enlisted men).												Native troops, enlisted men.		Office classification number.
United States (including Alaska).			Europe.	Philippine Islands.			Hawaii.	Panama.	China	Siberia.	Transports.			
139,153	7,764	146,917	15,219	8,841	1,733	10,574	4,985	4,426	1,233	977	1,975	1,533	7,295	
White.	Colored.	Total.	White.	White.	Colored.	Total.	White.	White.	White.	White.	White.	Porto Ricans.	Philippine Scouts.	
0.03	.....	0.03	0.20	.....	0.58	0.09	.....	0.23	.....	.....	.....	.....	0.14	1
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
.16	0.13	.16	.39	.....	.....	.....	0.20	.....	.....	1.02	0.51	.....	.14	3
.17	.13	.16	1.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
.06	.....	.06	.46	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
.06	.....	.06	.33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.01	.13	.01	.26	.....	.....	.....	.20	.....	.....	.....	.....	.....	.....	8
.01	.....	.01	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
1.62	.77	1.57	11.89	0.23	.58	.28	.40	.45	.....	2.05	.51	0.65	.....	10
.97	1.03	.97	13.08	.34	.....	.28	.40	.23	.....	4.09	.....	.....	.27	11
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
.02	.....	.02	.07	.....	.....	.....	.....	.....	0.81	.....	.....	.....	.....	13
.06	.....	.05	.07	.....	.....	.....	.....	.23	.....	.....	.....	.....	.....	14
.21	.....	.20	1.05	.....	.....	.....	.20	.....	.....	.....	.51	.....	.....	15
.01	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
.10	.13	.10	.53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
.09	.....	.08	.85	.11	.....	.09	.....	.....	.....	.....	.....	.....	.....	18
.14	.13	.14	.72	.....	.....	.....	.60	.....	.....	1.02	.....	.....	.....	19
.02	.13	.03	.72	.....	.....	.....	.20	.23	.....	1.02	.....	.....	.....	20
.32	.26	.32	1.77	.45	.....	.38	.20	.....	.....	1.02	.....	1.30	.14	21

TABLE XIII.—*Admissions, deaths, discharges for disability, and noneffective rates, Army nurses, 1920; absolute numbers and ratios per 1,000.*

Numbers of international classification.		Admissions.		Deaths.		Discharges for disability.		Days lost.	
	Mean strength	2,203		2,203		2,203		2,203	
	Disease.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Noneffective ratio.
	I. EPIDEMIC, ENDEMIC, AND INFECTIOUS DISEASES.								
5a	Malarial fever, estivo-autumnal	1	0.45					9	0.01
5c	Malarial fever, tertian	2	.91					30	.04
5d	Malarial fever, unclassified							68	.08
	Malarial fevers, all	3	1.36					107	.13
6	Smallpox	1	.45					[illegible]	.01
7	Measles	1	.45					20	.02
[illegible]	Scarlet fever	[illegible]	1.36					197	.24
10	Diphtheria	1	.45					36	.04
11	Influenza	116	52.65	1	0.45			2,185	2.71
13	Mumps	5	2.27					64	.08
16a	Dysentery, amebic	2	.91					24	.03
24	Meningococcus meningitis							177	.22
25a	Chicken pox	1	.45					16	.02
25ca	Dengue	26	11.80					164	.20
25cd	Vaccinia	1	.45					4	.00
25ce	Carrier, epidemic diseases	2	.91					38	.05
31	Tuberculosis of the respiratory system	20	9.08			12	5.45	19,995	24.80
32-36	Tuberculosis of the other organs	[illegible]	1.36					965	1.20
	Tuberculosis (all)	23	10.44			12	5.45	20,960	26.00
38	Venereal diseases, syphilis (all)	2	.91					115	.14
42	Other infectious diseases	1	.45					[illegible]	
	II. GENERAL DISEASES NOT INCLUDED ABOVE.								
43-49	Cancer and other malignant tumors	1	.45					696	.86
50	Benign tumors	2	.91					328	.41
51	Acute rheumatic fever	1	.45					290	.36
52b	Osteoarthritis	18	8.17			1	.45	1,914	2.37
58a	Pernicious anemia	1	.45					15	.02
58b	Other anemias and chlorosis	1	.45					52	.06
60a	Exophthalmic goiter							94	.12
60ba	Goiter, simple	2	.91					230	.29
61-65	Other diseases of ductless glands	2	.91					25	.03
69	Other general diseases	[illegible]	2.27	1	.45			172	.21
	III. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.								
	A. Nervous system.								
77c	Dementia præcox					2	.91	552	.68
77d	Psychasthenia							303	.38
77e	Psychoneurosis	4	1.82			1	.45	364	.45
77g	Psychosis, manic depressive	2	.91			1	.45	448	.56
82a	Hysteria and results (psychoses excepted)							338	.42
82b	Neuralgia	7	3.18					124	.15
82c	Neuritis	3	1.36					210	.26
84a	Neurasthenia	10	4.54					863	1.07
84b	Neuro-circulatory asthenia	4	1.82					70	.09
84c	Other diseases of the nervous system	[illegible]	1.36					421	.52
	B. Organs of special sense.								
[illegible]	The eye and annexa	7	3.18					281	.35
86	The ear and the mastoid process	14	6.35					822	1.02

TABLE XIII.—*Admissions, deaths, discharges for disability, and noneffective rates, Army nurses, 1920; absolute numbers and ratios per 1,000*—Continued.

Numbers of international classification.	Disease.	Admissions. Number.	Admissions. Ratio.	Deaths. Number.	Deaths. Ratio.	Discharges for disability. Number.	Discharges for disability. Ratio.	Days lost. Number.	Days lost. Noneffective ratio.
	Mean strength	2,203		2,203		2,203		2,203	
	IV. DISEASES OF THE CIRCULATORY SYSTEM.								
90a	Valvular diseases of the heart	6	2.72					613	0.76
90c	Myocarditis, chronic	4	1.82			3	1.36	562	.70
90d	Other diseases of the heart (organic)							86	.11
93a	Hemorrhoids	3	1.36					55	.07
93c	Varicose veins	1	.45					123	.15
93d	Phlebitis	1	.45					112	.14
94	Diseases of the lymphatic system	5	2.27					79	.10
96b	Cardiac disorder, functional					1	.45	19	.02
	V. DISEASES OF THE RESPIRATORY SYSTEM (TUBERCULOSIS EXCEPTED).								
97	Diseases of the nasal fossæ and their annexa	42	19.06					721	.89
97a	Deviation of nasal septum, and spurs							2	.00
97b	Turbinate hypertrophy	1	.45					46	.06
97c	Sinusitis	10	4.54					442	.55
97d	Rhinitis	29	13.16					219	.27
97e	Nasal fossæ, other diseases of	2	.91					12	.01
98	Diseases of the larynx	12	5.45					253	.31
99	Bronchitis	110	49.93			1	.45	1,967	2.44
100	Pneumonia, broncho	6	2.72					425	.53
101a	Pneumonia, lobar	4	1.82					296	.37
101b	Pneumonia, not otherwise defined	1	.45					68	.08
102a	Pleurisy, suppurative							60	.07
102b	Pleurisy, serofibrinous	2	.91					509	.63
102c	Pleurisy, others	10	4.54					346	.43
105	Asthma	1	.45					202	.25
107	Other diseases of the respiratory system							134	.17
	VI. DISEASES OF THE DIGESTIVE SYSTEM (TUBERCULOSIS EXCEPTED).								
108a	Pyorrhea alveolaris	1	.45					87	.11
108b	Other diseases of the mouth and annexa	5	2.27					449	.56
109ba	Pharyngitis, acute catarrhal	34	15.43					520	.65
109bb	Pharynx, other diseases of	11	4.99					382	.47
109bc	Tonsillitis, acute, follicular	139	63.10					1,761	2.18
109bd	Tonsillitis, chronic	48	21.79					827	1.03
109be	Other diseases of the pharynx and tonsils	3	1.36					143	.18
111a	Ulcer of the stomach	1	.45					183	.23
111b	Ulcer of the duodenum	5	2.27					245	.30
112	Other diseases of the stomach (cancer excepted)	17	7.72					559	.69
114a	Diarrhea (cause not stated)	3	1.36					5	.01
114b	Enteritis and colitis							94	.12
116	Other intestinal parasites	2	.91					12	.01
117	Appendicitis, and typhlitis	25	11.35					1,317	1.63
118a	Hernia	1	.45					56	.07
119b	Other diseases of the intestines	27	12.26					207	.26
123	Biliary calculi	2	.91					30	.04
124a	Cholecystitis	7	3.18					462	.57
124b	Other diseases of the liver	3	1.36					223	.28
127	Other diseases of the digestive system	7	3.18	1	.45			123	.28

TABLE XIII.—*Admissions, deaths, discharges for disability, and noneffective rates, Army nurses, 1920; absolute numbers and ratios per 1,000*—Continued.

Numbers of international classification.		Admissions.		Deaths.		Discharges for disability.		Days lost.	
	Mean strength	2,203		2,203		2,203		2,203	
	Disease.	Number.	Ratio.	Number.	Ratio.	Number.	Ratio.	Number.	Noneffective ratio.
	VII. NONVENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA (TUBERCULOSIS EXCEPTED).								
128	Acute nephritis	3	1.36					164	0.20
129	Chronic nephritis	4	1.82			1	0.45	812	1.01
131a	Pyogenic infection of the kidney							140	.17
131b	Other diseases of the kidney and annexa	5	2.27					177	.22
132a	Nephrolithiasis	1	.45					50	.06
132b	Vesical calculi	1	.45					15	.02
133a	Cystitis	2	.91					309	.38
	IX. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.								
152a	Carbuncle							19	.02
152b	Furuncle	3	1.36					56	.07
153a	Acute abscess	3	1.36					54	.07
153b	Cellulitis	5	2.27					89	.11
154h	Psoriasis	1	.45					64	.08
154j	Other diseases of the skin and cellular tissue	5	2.27					60	.07
	X. DISEASES OF THE BONE AND OF THE ORGANS OF LOCOMOTION (TUBERCULOSIS EXCEPTED).								
155a	Osteomyelitis							134	.17
155b	Other diseases of the bone	2	.91					22	.03
155c	Fractures, faulty union of	1	.45					29	.04
156b	Other diseases of the joints	2	.91					229	.28
158a	Hallux valgus	2	.91					155	.19
158b	Myositis	2	.91					9	.01
158c	Pes planus	2	.91					450	.56
158d	Tenosynovitis	1	.45					18	.02
158e	Other diseases of the organs of locomotion	11	4.99					269	.33
	XI. MALFORMATION.								
159	Congenital malformations	3	1.36					19	.02
	XV. ILL-DEFINED DISEASES.								
204–205	Not specified or ill-defined	62	28.14					1,470	1.82
	Total for diseases	946	429.41	3	1.36	23	10.44	51,997	64.49
	Total for diseases (excluding deaths, discharges, and days lost for cases admitted prior to 1920.	946	429.41	2	.91	7	3.18	27,350	33.92

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